United Nations A/CN.4/720

General Assembly

Distr.: General
30 April 2018

Original: English

International Law Commission
Seventieth session
New York, 30 April–1 June 2018 and Geneva,
2 July–10 August 2018

First report on protection of the environment in relation to armed conflicts by Marja Lehto, Special Rapporteur

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Introduction*

A. Previous work on the topic

1. The Commission included the topic "Protection of the environment in relation to armed conflicts" in its programme of work at its sixty-fifth session (2013) and appointed Ms. Marie G. Jacobsson as Special Rapporteur for the topic.[1] The Commission considered the preliminary report of the Special Rapporteur (A/CN.4/674 and Corr.1) at its sixty-sixth session (2014)[2], and her second report (A/CN.4/685) at its sixty-seventh session (2015).[3] At its sixty-eighth session (2016), the Commission considered the third report of the Special Rapporteur (A/CN.4/700),[4] and provisionally adopted eight draft principles as well as the commentaries to these draft principles.[5] The Commission also took note of nine other draft principles, which had been provisionally adopted by the Drafting Committee at the same session.[6]

2. At its sixty-ninth session (2017), the Commission decided to establish a Working Group to consider the way forward in relation to the topic as Ms. Jacobsson was no longer with the Commission.[7] The Working Group noted that substantial work had already been done on the topic and underlined the need for its completion, maintaining and building upon the work accomplished so far. The Working Group noted that, in addition to certain aspects of the draft principles, such as streamlining, terminology, filling gaps and overall structuring of the text, as well as completion of the draft commentaries, there were other areas that could be further addressed. In that regard, references were made, *inter alia*, to issues of complementarity with other relevant branches of international law, such as international environmental law, protection of the environment in situations of occupation, issues of responsibility and liability, the responsibility of non-State actors and overall application of the draft principles to armed conflicts of a non-international character.[8] The Commission agreed with the conclusions of the Working Group and decided to appoint Ms. Marja Lehto as Special Rapporteur for the topic.[9]

B. Debates held in the Sixth Committee of the General Assembly at its seventy-first (2016) and seventy-second (2017) sessions

3. In 2016, the Sixth Committee had before it the draft principles with commentaries that the Commission had provisionally adopted as well as the draft principles provisionally adopted by the Drafting Committee. Altogether 33 States and

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* The Special Rapporteur is grateful to Katerina N. Wright of New York University, Outi Penttilä of the University of Helsinki and Rina Kuusipalo of Stanford Law School for research assistance in the preparation of the present report.

[1] *Official Records of the General Assembly, Sixty-eighth Session, Supplement No. 10* (A/68/10), para. 131.

[2] *Ibid., Sixty-ninth Session, Supplement No. 10* (A/69/10), paras. 186–222.

[3] *Ibid., Seventieth Session, Supplement No. 10* (A/70/10), paras. 130–170.

[4] *Ibid., Seventy-first Session, Supplement No. 10* (A/71/10), paras. 139–189.

[5] *Ibid.*, para. 188.

[6] *Ibid.*, para. 146. For the text of these draft principles, see annex I.

[7] *Official Records of the General Assembly, Seventy-second Session, Supplement No. 10* (A/72/10), para. 255.

[8] *Ibid.*, para. 259.

[9] *Ibid.*, para. 262.

the International Committee of the Red Cross (ICRC) in 2016[10] and 18 States in 2017[11] addressed the topic. Those who spoke were generally supportive of the topic and underlined its relevance.[12] References were made in this respect, *inter alia*, to the United Nations Environmental Assembly of the United Nations Environment Programme (UNEP),[13] the Global High-level Panel on Water and Peace,[14] the 2030 Agenda for Sustainable Development and the Sustainable Development Goals.[15] The Commission's decision to continue the work on the topic was generally welcomed, and several States supported continued consultations with the ICRC, UNEP and the United Nations Educational, Scientific and Cultural Organization, as well as other international organizations with relevant expertise.[16]

4. While the view was expressed that the topic should be limited to the law of armed conflicts,[17] there was considerable support to the consideration of the interplay between the law of armed conflicts and other branches of international law, in particular human rights law and international environmental law, which was seen as "intrinsic to the topic".[18] It was furthermore pointed out that environmental

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[10] Austria (A/C.6/71/SR.27, paras. 106–109); China (A/C.6/71/SR.24, para. 96); Croatia (A/C.6/71/SR.28, para. 41); Czechia (A/C.6/71/SR.27, paras. 118–120); Egypt (A/C.6/71/SR.23, para. 45); El Salvador (A/C.6/71/SR.27, paras. 142–150); Federated States of Micronesia (A/C.6/71/SR.28, paras. 52–59); France (A/C.6/71/SR.20, para. 79); Greece (A/C.6/71/SR.29, paras. 16–18); India (A/C.6/71/SR.30, para. 20); Indonesia (*ibid.*, paras. 8–9); ICRC (*ibid.*, para. 21); the Islamic Republic of Iran (A/C.6/71/SR.29, paras. 92–93); Israel (*ibid.*, paras. 99–101); Japan (*ibid.*, para. 89); Lebanon (A/C.6/71/SR.28, paras. 16–18); Malaysia (A/C.6/71/SR.29, paras. 28–33); Mexico (*ibid.*, paras. 75–76); the Netherlands (*ibid.*, paras. 2–4); Norway (on behalf of the five Nordic countries: Denmark, Finland, Iceland, Norway and Sweden) (A/C.6/71/SR.27, paras. 90–94); Peru (A/C.6/71/SR.30, para. 7); Portugal (A/C.6/71/SR.28, paras. 32–33); the Republic of Korea (A/C.6/71/SR.30, para. 13); Romania (A/C.6/71/SR.28, paras. 19–20); Singapore (A/C.6/71/SR.27, para. 129); Slovenia (A/C.6/71/SR.29, paras. 50–53); Spain (A/C.6/71/SR.28, paras. 42–45); Sudan (*ibid.*, para. 2); Thailand (A/C.6/71/SR.29, para. 10); Togo (A/C.6/71/SR.23, para. 20); Ukraine (A/C.6/71/SR.30, paras. 2–4); the United States of America (A/C.6/71/SR.29, paras. 69–70); and Viet Nam (*ibid.*, paras. 43–45).

[11] Austria (A/C.6/72/SR.25, para. 47); Czechia (A/C.6/72/SR.26, para. 90); Denmark (on behalf of the five Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden) (A/C.6/72/SR.25, para. 40); El Salvador (A/C.6/72/SR.26, paras. 128–129); Lebanon (*ibid.*, para. 92); Malaysia (*ibid.*, paras. 119–120); the Netherlands (*ibid.*, para. 37); Portugal (A/C.6/72/SR.25, para. 94); Romania (A/C.6/72/SR.26, paras. 28–29); the Russian Federation (A/C.6/72/SR.19, para. 36); Slovenia (A/C.6/72/SR.25, para. 108); Spain (*ibid.*, para. 67); Thailand (A/C.6/72/SR.26, para. 60); Trinidad and Tobago (on behalf of CARICOM) (A/C.6/72/SR.25, para. 34); Turkey (A/C.6/72/SR.26, para. 104); the United Kingdom of Great Britain and Northern Ireland (*ibid.*, para. 114); the United States of America (*ibid.*, paras. 8–9); and Viet Nam (*ibid.*, para. 123).

[12] See, however, Czechia (*ibid.*, para. 90) and the Russian Federation (A/C.6/72/SR.19, para. 36).

[13] The United Nations Environmental Assembly resolution 2/15 of 27 May 2016 entitled "Protection of the environment in areas affected by armed conflict" (UNEP/EA.2/Res.15) expressed support to the ongoing work of the Commission on this topic (twelfth preambular paragraph). See also its resolution 3/1 of 5 December 2017 entitled "Pollution mitigation and control in areas affected by armed conflict or terrorism" (UNEP/EA.3/Res.1), which "*[r]equests* the Executive Director to continue the Programme's interaction with the International Law Commission inter alia by providing relevant information to the Commission at its request in support of its work pertaining to pollution resulting from armed conflict and terrorism" (para. 11).

[14] *A Matter of Survival: Report of the Global High-Level Panel on Water and Peace*, (2017).

[15] General Assembly resolution 70/1 of 25 September 2015, entitled "Transforming our world: the 2030 Agenda for Sustainable Development" (A/RES/70/1).

[16] Malaysia (A/C.6/72/SR.26, para. 119); Portugal (A/C.6/71/SR.28, para. 33); Slovenia (A/C.6/72/SR.25, para. 108); and Thailand (A/C.6/71/SR.29, para. 10, and A/C.6/72/SR.26, para. 60).

[17] Mexico (A/C.6/71/SR.29, para. 75).

[18] Greece (*ibid.*, para. 17). See also El Salvador (A/C.6/71/SR.27, para. 149); Federated States of Micronesia (A/C.6/71/SR.28, para. 54); Portugal (*ibid.*, para. 32); and Thailand (A/C.6/72/SR.26, para. 60, and A/C.6/71/SR.29, para. 10). See also Malaysia (A/C.6/72/SR.26, para. 120), Romania (*ibid.*, para. 28); and Trinidad and Tobago (on behalf of CARICOM) (A/C.6/72/SR.25, para. 34).

degradation during and after an armed conflict had a direct impact on human well-being.[19] The need to clarify "how other bodies of international law might provide complementary protection to the environment, including during armed conflict" was highlighted.[20] The law of the sea[21] and treaty law[22] were also mentioned in this context. At the same time, the role of international humanitarian law as *lex specialis* in armed conflicts was emphasized[23] and it was pointed out "that the Commission should not seek to modify the law of armed conflict".[24]

5. The choice of a temporal approach to the topic was generally supported, although it was pointed out that it might be difficult to maintain a strict division between the different sets of draft principles as many of them would apply during all three phases — before, during, and after an armed conflict.[25] Some States called for a definition of the concept of "natural environment"[26] or for clarification as to whether the draft principles addressed "the natural environment" or "the environment" in general.[27] Others expressed the view that environmental issues could not be limited to the natural environment as they included human rights, sustainability and cultural heritage, and preferred the broader term.[28] It was also noted that the two terms had been used inconsistently and should be revisited at a later stage.[29] It was further held that "a natural environment could not be viewed as distinct from the people who inhabited it and relied on it, inter alia, for sustenance, shelter, cultural practices and sustainable development".[30] The damage caused by armed conflicts to the environment, it was stated, could have long-term devastating impacts on both the earth's ecological well-being and the livelihood of the population, potentially reversing years of hard-earned developmental gains.[31] The connections between a safe natural environment and living conditions for human beings, on the one hand, and international peace and security, on the other, were underlined.[32]

6. There were a number of comments on the classification of armed conflicts and on how this was reflected in the draft principles. Some States were of the view that the draft principles should not address non-international armed conflicts,[33] while several other States saw that this would be necessary given the prevalence of non-international armed conflicts today.[34] Some States underlined the need to clarify which of the draft principles were applicable to both international and non-international armed conflicts, or to expressly state that the set of draft principles

[19] Lebanon (A/C.6/71/SR.28, para. 18); and Ukraine (A/C.6/71/SR.30, para. 2).

[20] ICRC (*ibid.*, para. 21).

[21] Romania (A/C.6/72/SR.26, para. 28).

[22] Malaysia (*ibid.*, para. 120).

[23] The United Kingdom of Great Britain and Northern Ireland (*ibid.*, para. 114) and the United States of America (*ibid.*, para. 8).

[24] The United Kingdom of Great Britain and Northern Ireland (A/C.6/71/SR.28, para. 25). See also the Netherlands (A/C.6/72/SR.26, para. 37).

[25] China (A/C.6/71/SR.24, para. 96); El Salvador (A/C.6/71/SR.27, para. 142); the Islamic Republic of Iran (A/C.6/71/SR.29, para. 92); Lebanon (A/C.6/71/SR.28, paras. 16–17); the Netherlands (A/C.6/71/SR.29, para. 2); Portugal (A/C.6/71/SR.28, para. 33); and the Republic of Korea (A/C.6/71/SR.30, para. 13). See, however, Malaysia (A/C.6/71/SR.29, para. 28) and Spain (A/C.6/71/SR.28, paras. 42–43).

[26] Israel (A/C.6/71/SR.29, para. 101).

[27] El Salvador (A/C.6/71/SR.27, para. 143); and the Republic of Korea (A/C.6/71/SR.30, para. 13).

[28] Malaysia (A/C.6/71/SR.29, paras. 29–30) and Sudan (A/C.6/71/SR.28, para. 2).

[29] Malaysia (A/C.6/71/SR.29, para. 29).

[30] Federated States of Micronesia (A/C.6/71/SR.28, para. 54).

[31] Thailand (A/C.6/72/SR.26, para. 60) and Ukraine (A/C.6/71/SR.30, paras. 2–3).

[32] Denmark (on behalf of the five Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden) (A/C.6/72/SR.25, para. 40).

[33] The Islamic Republic of Iran (A/C.6/71/SR.29, para. 93) and Mexico (*ibid.*, para. 75).

[34] El Salvador (A/C.6/72/SR.26, para. 128); Portugal (A/C.6/71/SR.28, para. 33); and Trinidad and Tobago (on behalf of CARICOM) (A/C.6/72/SR.25, para. 34).

as a whole applied to both.[35] A concern was expressed about the use of mandatory language in several draft principles.[36]

7. As to draft principle 9 [II-1] on "General protection of the natural environment during armed conflict", it was pointed out that the preventive measures should seek not only to minimize but also to avoid damage to the environment. It was suggested that Rule 44 of the ICRC study entitled *Customary International Humanitarian Law*[37] and the precautionary principle could provide guidance on how to approach the issue of prevention. Furthermore, the Commission was urged to provide more information on the meaning of the threshold of "widespread, long-term and severe damage" referred to in draft principle 9, paragraph 2, as well as in article 35, paragraph 3 and article 55, paragraph 1 of the Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Protocol I).[38] Questions were raised regarding the compatibility and relationship between draft principle 5 [I-(x)] on the "Designation of protected zones", on the one hand, and draft principle 9 and draft principle 12 [II-4] on the "Prohibition of reprisals", on the other.[39]

8. With respect to draft principles that the Commission has taken note of — 4, 6 to 8 and 14 to 18 — numerous comments were made in what can be seen as an initial debate on their content. This debate is expected to continue at a later session when the accompanying commentaries have been made available and such draft principles have been provisionally adopted by the Commission.

9. Some States questioned the relevance of issues relating to indigenous peoples as referred to in draft principle 6.[40] Some other States supported their inclusion,[41] holding that the interests of indigenous communities should be respected in all phases of an armed conflict.[42] It was furthermore suggested that the draft principles should address "the obligations of belligerents to take into consideration the traditional knowledge and practices of indigenous peoples in relation to their natural environment".[43] Yet other States encouraged further analysis of these issues[44] or wished to extend the attention to other categories of people that have a close connection to the environment in the territories they inhabit.[45]

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[35] El Salvador (A/C.6/71/SR.27, para. 142); Malaysia (A/C.6/71/SR.29, para. 31); the Republic of Korea (A/C.6/71/SR.30, para. 13); Slovenia (A/C.6/71/SR.29, para. 50); and Spain (A/C.6/71/SR.28, para. 44).

[36] The United States of America (A/C.6/72/SR.26, para. 9).

[37] "Methods and means of warfare must be employed with due regard to the protection and preservation of the natural environment. In the conduct of military operations, all feasible precautions must be taken to avoid, and in any event to minimise, incidental damage to the environment. Lack of scientific certainty as to the effects on the environment of certain military operations does not absolve a party to the conflict from taking such precautions" (J.-M. Henckaerts and L. Doswald-Beck, *Customary International Humanitarian Law: Rules*, vol. I, ICRC and Cambridge University Press, 2005, p. 147).

[38] Greece (A/C.6/71/SR.29, para. 18).

[39] El Salvador (A/C.6/72/SR.26, para. 129) and Spain (A/C.6/71/SR.28, paras. 44–45).

[40] France (A/C.6/71/SR.20, para. 79); Indonesia (A/C.6/71/SR.30, paras. 8–9); Israel (A/C.6/71/SR.29, para. 100); Mexico (*ibid.*, para. 76); the Netherlands (*ibid.*, para. 2); and Viet Nam (*ibid.*, para. 45).

[41] El Salvador (A/C.6/71/SR.27, para. 150); the Federated States of Micronesia (A/C.6/71/SR.28, para. 58); and Malaysia (A/C.6/71/SR.29, para. 33.

[42] Federated States of Micronesia (A/C.6/71/SR.28, para. 58).

[43] *Ibid.*

[44] Slovenia (A/C.6/71/SR.29, para. 52).

[45] Romania (A/C.6/71/SR.28, para. 19 and A/C.6/72/SR.26, para. 29).

10. Draft principle 16 on "Remnants of war", and draft principle 17 on "Remnants of war at sea" were generally welcomed while some changes were proposed.[46] As for draft principle 16, it was pointed out that the scope of the draft principle was larger than the provisions in the Protocol on Prohibitions or Restrictions on the Use of Mines, Boobytraps and Other Devices as amended on 3 May 1996 (Protocol II as amended on 3 May 1996) annexed to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects and the Protocol on Explosive Remnants of War to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects (Protocol V)[47]. Specific comments on the issue of remnants included a proposal that the draft principles should indicate that the party to a conflict that introduces harmful substances to nature has the responsibility to search for, clear and destroy the remnants of war it leaves behind,[48] and that references to environmental damage and environmental protection should be clearly expressed in the text of the draft principles dealing with remnants of war.[49] It was also submitted that the Commission should reconsider the exclusion of the expression "without delay" from the draft principle.[50] It was pointed out that some remnants of war had an immediate environmental impact so that any delay in their removal could be disastrous to the environment and pose a continuing hazard to the human population.[51] Some other States welcomed the current formulation that did not contain this expression.[52]

11. The necessity of draft principle 8 on "Peace operations" was questioned[53] but the draft principle also received support,[54] while it was felt that further discussion of its content was required.[55] Draft principle 15 on "Post-armed conflict environmental assessments and remedial measures" was supported and the important role of competent international organizations and agencies in this respect was highlighted.[56] Draft principle 18 on sharing of information was supported although comments were made concerning its scope.[57]

C. Purpose and structure of the report

12. The present report has a twofold purpose. Following the list of issues identified by the Working Group as being in need of further consideration in the context of the topic, the report focuses, in the first place, on the protection of the environment in situations of occupation. As the previous work on this topic has amply proved, there

[46] El Salvador (A/C.6/71/SR.27, para. 149); the Federated States of Micronesia (A/C.6/71/SR.28, paras. 56–57); Lebanon (*ibid.*, para. 17); Slovenia (A/C.6/71/SR.29, para. 52); Ukraine (A/C.6/71/SR.30, para. 3); and Viet Nam (A/C.6/71/SR.29, para. 44).

[47] Israel (*ibid.*, para. 100); the Netherlands (*ibid.*, para. 3); and the United States of America (*ibid.*, para. 70, and A/C.6/72/SR.26, para. 9).

[48] Viet Nam (A/C.6/71/SR.29, para. 44).

[49] Portugal (A/C.6/71/SR.28, para. 32).

[50] Federated States of Micronesia (A/C.6/71/SR.28, para. 57).

[51] *Ibid.* See, similarly, El Salvador (A/C.6/71/SR.27, para. 149).

[52] Israel (A/C.6/71/SR.29, para. 100) and the Netherlands (*ibid.*, para. 3).

[53] The Netherlands (*ibid.*, para. 2); the United States of America (*ibid.*, para. 70); and Viet Nam (*ibid.*, para. 45). See also Austria (A/C.6/71/SR.27, para. 107).

[54] The Federated States of Micronesia (A/C.6/71/SR.28, para. 55).

[55] Norway (on behalf of the five Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden) (A/C.6/71/SR.27, para. 94).

[56] The Federated States of Micronesia (A/C.6/71/SR.28, para. 55); Lebanon (*ibid.*, para. 17); and Ukraine (A/C.6/71/SR.30, para. 4).

[57] The Netherlands (A/C.6/71/SR.29, para. 4); Slovenia (*ibid.*, para. 53); and Ukraine (A/C.6/71/SR.30, para. 4).

are environmental concerns that need to be addressed throughout the conflict cycle: before, during and after an armed conflict. The same is true of situations of occupation.[58] When an occupation is a consequence of an armed conflict, it can be taken that the environment has already suffered significant harm. Furthermore, the institutional collapse that often results from an armed conflict affects also environmental administration and hampers post-conflict efforts to respond to environmental problems.[59] Periods of intense hostilities during occupation, or resumption of armed conflict, may further add to and exacerbate existing environmental problems.[60] While a more stable occupation can bear much resemblance to a post-conflict situation, allowing for the occupant to take measures and adopt policies that benefit the environment of the occupied territory, certain occupation practices may further contribute to the degradation of the environment. For instance, the occupation army and the military infrastructure supporting it can be expected to leave an environmental footprint. The environmental harm resulting from military activities may be related, *inter alia*, to the use of chemicals or weapons, inappropriate disposal or dumping of toxic or hazardous waste, or the use of natural resources.[61]

13. The protection provided to the environment by the law of occupation — The Hague Regulations of 1907,[62] the Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV), Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Protocol I), and customary law — is mostly indirect. Apart from Protocol I, the instruments setting forth the law of occupation predate the emergence of international environmental law as a separate branch of international law, or even the conceptualization of "the environment" as a subject of legal protection. While the rules of the law of occupation thus lack specific provisions on the protection of the environment, they have proved flexible enough to be adapted to changing circumstances. For instance, some of the provisions on property rights have consistently, and for a long time, been interpreted so as to apply to natural resources, such as oil and water, which are also important environmental resources. The destruction, depletion or unsustainable utilization of natural resources may lead to the degradation of ecosystems, including the loss of habitat and species.[63]

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[58] See the UNEP environmental assessments in conflict-affected countries, for example: *A Rapid Assessment of the Impacts of the Iraq–Kuwait Conflict on Terrestrial Ecosystems*, Parts I–III (1991); *Desk Study on the Environment in the Occupied Palestinian Territories* (2003) (available from https://postconflict.unep.ch/publications/INF-31-WebOPT.pdf); *Desk Study on the Environment in Iraq* (2003); *Environment in Iraq: UNEP Progress Report* (2003); *Assessment of Environmental "Hot Spots" in Iraq* (2005); and *Environmental Assessment of the Areas Disengaged by Israel in the Gaza Strip* (2006).

[59] UNEP, *From Conflict to Peacebuilding: the Role of Natural Resources and the Environment*, 2009, p. 17.

[60] UNEP, *Environmental Assessment of the Gaza Strip, following the escalation of hostilities in December 2008–January 2009* (2009); and *Protecting the Environment During Armed Conflict: an Inventory and Analysis of International Law*, 2009, pp. 17–18.

[61] See U. C. Jha, *Armed Conflict and Environmental Damage*, New Delhi, Vij Books India Pvt Ltd, 2014, on the environmental impact of the maintenance of military bases, see pp. 174–179. See also D. L. Shelton and I. Cutting, "If you break it, do you own it? Legal consequences of environmental harm from military activities", *Journal of International Humanitarian Legal Studies*, vol. 6 (2015), pp. 201–246, at pp. 206–213; and Z. Brophy and J. Isaac, "The environmental impact of Israeli military activities in the occupied Palestinian territory", Applied Research Institute, Jerusalem, available from http://www.arij.org/files/admin/2009/The%20environmental%20impact%20of%20Israeli%20military.pdf.

[62] Convention (IV) respecting the laws and customs of war on land (Hague Convention IV), Annex to the Convention: Regulations Respecting the Laws and Customs of War on Land ("The Hague Regulations").

[63] See D. Jensen and S. Lonergan (eds.), *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding*, Abingdon, Routledge, 2013.

14. In the second place, the report addresses the complementarity of other relevant areas of international law, which was another issue raised in the Working Group — and indeed one that is inherent to the topic. Situations of occupation encompass a broad range of variations between armed conflict and peacetime and thus provide several opportunities for considering the interplay between the law of armed conflicts, international human rights law and international environmental law. It is widely recognized that human rights law applies to situations of occupation. How human rights law applies depends nevertheless on the prevailing circumstances such as the nature of the occupation (calm or volatile) and its duration, and is in many ways conditioned by the law of occupation as *lex specialis*. The multiple links between human rights law and the environment have been generally acknowledged.[64] In particular, economic, social and cultural rights such as the rights to water, food, health and life "cannot be ensured in an environmental vacuum"[65] but are dependent on the protection of the environment and ecosystems. In addition to substantive environmental rights, procedural rights contribute to the protection of the environment, most pertinently in terms of participatory rights and the access of the population to information about environmental risks.[66]

15. Environmental concerns have permeated most areas of international law. The advisory opinion of the International Court of Justice on the *Legality of the Threat or Use of Nuclear Weapons* made clear that this is true also of the law of armed conflicts.[67] The Commission's work on the topic "Effects of armed conflicts on treaties" has likewise paved the way for considering how international environmental law can complement the law of armed conflicts.[68] Much in the same way as with human rights law, the specific context of a situation of occupation, as well as the requirements of the law of occupation, may limit the practical application of international environmental obligations.

16. The report builds on the previous three reports on the topic and seeks to ensure coherence with the work that has been undertaken so far. The point of departure for the Commission's work on this topic should remain the same: the Commission does not intend, nor is it in a position, to modify the law of armed conflict.[69] On this basis, the report will focus on identifying and clarifying the guiding principles and/or obligations relating to the protection of the environment which arise under international law in the context of situations of occupation.

17. Chapter I of the report deals with the protection of the environment under the law of occupation. Section A provides a general introduction to the concept of occupation. Section B addresses property rights as a basis for the protection of the

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[64] Office of the United Nations High Commissioner for Human Rights and UNEP, *Human Rights and the Environment: Rio+20: Joint Report OHCHR and UNEP*, 2012; Human Rights Council, Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox, of 30 December 2013 (A/HRC/25/53) as well as his further reports of 3 February 2015 (A/HRC/28/61) and 24 January 2018 (A/HRC/37/59, as Special Rapporteur on the same issue).

[65] K. Hulme, "Using a framework of human rights and transitional justice for post-conflict environmental protection and remediation", in Carsten Stahn, Jens Iverson and Jennifer S. Easterday, eds., *Environmental Protection and Transitions from Conflict to Peace*. Oxford University Press, 2017, pp. 119–142, p. 124.

[66] See, for instance, the Rio Declaration on Environment and Development, 12 August 1992 (A/CONF/151/26/Rev.1 (vol. I)), p. 5, principle 10.

[67] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996*, p. 226.

[68] Draft articles on the effects of armed conflicts on treaties with commentaries thereto, *Yearbook ... 2011*, vol. II (Part Two), pp. 107–130, paras. 100–101.

[69] Preliminary report of the Special Rapporteur, Ms. Marie Jacobsson, A/CN.4/674 and Corr.1, para. 62.

environment. Section C contains an overview of other rules of the law of occupation that are relevant from the point of view of protecting the environment. Chapter II addresses the complementarity between the law of occupation and human rights law with a specific focus on the right to health. Chapter III discusses the complementarity between the law of occupation and international environmental law. Chapter IV contains the new draft principles proposed in this report, and chapter V deals with future work on this topic.

18. As a matter of convenience, the eight draft principles provisionally adopted by the Commission to date as well as the nine draft principles provisionally adopted by the Drafting Committee have been annexed to this report.

I. Protection of the environment under the law of occupation

A. Concept of occupation

19. Situations of military occupation are seen in the law of armed conflict as a specific form of international armed conflict. It is worth recalling in this context that the end of an international armed conflict is determined by the general close of military operations[70] or, in the case of occupation, the termination of the occupation.[71] Situations of occupation are governed by special rules of the law of armed conflict. In practical terms, however, occupations differ from armed conflicts in many respects. Most notably, occupations are typically not characterized by active hostilities and can even take place in situations in which the invading armed forces meet no armed resistance.[72] There are no established rules as to the duration of an occupation, and a great variety of circumstances may qualify as a situation of occupation. Occupations of long duration, in particular, may "approximat[e] peacetime".[73] Short periods of foreign rule in a part of a territory during an armed conflict can nevertheless also qualify as occupation.[74] The occupying State may confront armed resistance during the occupation and even temporarily lose control of part of the occupied territory

[70] Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV), art. 6. According to paragraph 3 of that article, the application of the Convention in an occupied territory shall cease one year after the general close of military operations, while the occupying Power continues to be bound by a number of provisions "to the extent that such Power exercises the functions of government in such territory".

[71] Protocol additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Protocol I), art. 3 (*b*). This provision effectively replaces the "one-year-rule" for the parties to Protocol I (UK Ministry of Defence, *The Manual of the Law of Armed Conflict*, Oxford University Press, 2004, p. 277, para. 11.8). See also R. Kolb and S. Vité, *Le droit de l'occupation militaire. Perspectives historiques et enjeux juridiques actuels*, Brusells, Bruylant, 2009, p. 166.

[72] Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV), art. 2, para. 2.

[73] A. Roberts, "Prolonged military occupation: the Israeli-occupied territories since 1967", *American Journal of International Law*, vol. 84 (1990), pp. 44–103, p. 47. The article mentions several cases of occupations lasting more than five years in the period since the Second World War.

[74] According to the Eritrea–Ethiopia Claims Commission, "[o]n the one hand, clearly, an area where combat is ongoing and the attacking forces have not yet established control cannot normally be considered occupied … . On the other hand, where combat is not occurring in an area controlled even for just a few days by the armed forces of a hostile Power, the Commission believes that the legal rules applicable to occupied territory should apply" (*Partial Award: Central Front–Eritrea's Claims 2, 4, 6, 7, 8 & 22. Decision of 28 April 2004*, UNRIAA, vol. XXVI, pp. 115–153, at p. 136, para. 57.

without this affecting the characterization of the situation as one of occupation.[75] As a general matter, however, the phase of armed hostilities and the phase of occupation remain distinct from each other and are governed by different rules. In this respect, occupations can be said to constitute an intermediate phase between war and peace.[76]

20. The established understanding of the concept of occupation is based on article 42 of The Hague Regulations of 1907, according to which, "[t]erritory is considered occupied when it is actually placed under the authority of the hostile army. The occupation extends only to the territory where such authority has been established and can be exercised". The definition covers situations in which authority over a certain territory is transferred from a territorial State, without its consent, to the occupying State, but it also extends to territories with unclear status that are placed under foreign rule.[77] The definition contained in article 42 has been confirmed by the International Court of Justice and the International Tribunal for the Former Yugoslavia, which have referred to it as the exclusive standard for determining the existence of a situation of occupation under the law of armed conflict.[78] While the 1907 definition is based on the classical notion of belligerent occupation[79] it covers today "a wide range of cases in which the armed forces of a State, or of several States, exercise authority, on a temporary basis, over inhabited territory outside the accepted international frontiers of their State".[80]

21. The main characteristic of a situation described in article 42 is effective control, which has been described as the *sine qua non* of occupation.[81] It is in this respect not sufficient that the armed forces of the occupying State have physically entered the occupied territory without a valid consent of the local government. According to the judgment in *Armed Activities on the Territory of the Congo*, it was necessary "that the Ugandan armed forces in the [Democratic Republic of the Congo] were not only stationed in particular locations but also that they had substituted their own authority for that of the Congolese Government".[82] Authority in this context is a factual concept; occupation "does not transfer the sovereignty to the occupant, but simply the authority to exercise some of the rights of sovereignty".[83] What is deemed as

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[75] ICRC, Commentary of 2016 to article 2 of the Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (Convention I), para. 302, available from www.icrc.org. See, similarly, *The Manual of the Law of Armed Conflict* (footnote 71 above), p. 277, para. 11.7.1.

[76] Kolb and Vité (see footnote 71 above), p. 114: "le régime de l'occupation reste principalement un droit de transition de la guerre vers la paix". The International Tribunal for the Former Yugoslavia has described occupation as "a transitional period following invasion and preceding the agreement on the cessation of the hostilities" (*Prosecutor v. Mladen Naletilić, aka "TUTA" and Vinko Martinović, aka "ŠTELA", Case No. IT-98-34-T, Judgment of 31 March 2003*, Trial Chamber, para. 214.

[77] *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004*, p. 136, at pp. 174–175, para. 95.

[78] *Ibid.*, para. 78; *Prosecutor v. Naletilić and Martinović* (see footnote 76 above), para. 215. See also ICRC, Commentary of 2016 to article 2 … (see footnote 75 above), para. 298.

[79] See E. Benvenisti, "Occupation, belligerent", para. 1, *Max Planck Encyclopedia of Public International Law*, available from www.mpepil.com.

[80] A. Roberts, "Occupation, military, termination of", para. 3, *Ibid.* See also A. Roberts, "What is a military occupation?", *British Yearbook of International Law*, vol. 55, No. 1 (1985), pp. 249–305.

[81] Y. Dinstein, *The International Law of Belligerent Occupation*, Cambridge University Press, 2009, p. 43.

[82] *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda), Judgment, I.C.J. Reports 2005*, p. 168, at p. 230, para. 173. See also *The Manual of the Law of Armed Conflict* (footnote 71 above), p. 275, para. 11.3.

[83] *United States Department of Defense Law of War Manual*, June 2015, updated December 2016 (*United States Law of War Manual*), sect. 11.4, pp. 752–754. See also K. Dörmann and H.-P. Gasser, "Protection of the Civilian Population", in D. Fleck (ed.), *The Handbook of International Humanitarian Law*, 3rd ed., Oxford University Press, 2013, pp. 231–320, at p. 274, para. 529.

"effective control" for the purposes of qualifying a situation as one of occupation depends on the prevailing circumstances.[84] Full control over the whole territory, or part of the territory, of the occupied State is not required at all times provided that the occupying State has established its authority and retains the capacity to exercise such authority.[85] Once established in a certain land territory, the authority of the occupying State is seen to also extend to the adjacent maritime areas as well as the superjacent air space.[86]

22. While it is generally agreed that the end of an occupation has to be determined on the basis of the same conditions that are required for its beginning — presence of hostile forces with capacity to exercise effective control, incapacitation of the territorial sovereign[87] — occupations often end in a gradual process.[88] The disengagement of Israel from Gaza in 2005, for instance, has given rise to different legal assessments. Some commentators speak simply of a continuation of the occupation,[89] others of a transition to other legal regimes[90] and still others of a continuation of the application of certain aspects of the law of occupation. According to the so-called "functional approach", the law of occupation allows for a phased application depending on the nature and extent of the control exercised by the occupant.[91] The ICRC agrees that in "some specific and exceptional cases" when foreign forces withdraw from an occupied territory while retaining key elements of authority or other important governmental functions that are typical of those usually taken on by an occupying Power, "the law of occupation might continue to apply within the territorial and functional limits of those competences".[92]

23. The ICRC Commentary of 2016 on common article 2 of the Geneva Conventions for the protection of war victims puts forward three cumulative conditions that have to be met in order to establish a state of occupation within the meaning of international humanitarian law:

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[84] Such as terrain, density of population, or degree of resistance: see Dinstein (footnote 82 above), p. 43–44; and *United States Department of Defense Law of War Manual* (see footnote above), sect. 11.2.2.1, p. 746. See also *Prosecutor v. Naletilić and Martinović* (see footnote 76 above), para. 218: the Trial Chamber found it must determine on a case-by-case basis whether the required degree of control was established at the relevant times and in the relevant places.

[85] ICRC, Commentary of 2016 to article 2 ... (see footnote 75 above), para. 302. See also *The Manual of the Law of Armed Conflict* (footnote 71 above), p. 275, para. 11.3.

[86] *Manual of the Laws of Naval War*, Oxford, 9 August 1913, Section VI, art. 88, available from https://ihl-databases.icrc.org/ihl/INTRO/265?OpenDocument; Dinstein (see footnote 81 above), p. 47; E. Benvenisti, *The International Law of Occupation*, 2nd ed., Oxford University Press, 2012, p. 55, referring to the practice of several occupants; and M. Sassòli, "The concept and the beginning of occupation", *in* A. Clapham, P. Gaeta and M. Sassòli (eds.), *The 1949 Geneva Conventions: a Commentary*, Oxford University Press, 2015, pp. 1389–1419, at p. 1396.

[87] Kolb and Vité (see footnote 71 above), p. 15; and ICRC, Commentary of 2016 to article 2 ... (see footnote 75 above), para. 306.

[88] Roberts, "Occupation, military, termination of" (see footnote 80 above); and ICRC, Commentary of 2016 to article 2 ... (see footnote 75 above), para. 305.

[89] Dinstein regarded "[t]he insistence by Israel on its liberty to retake militarily (at its discretion) any section of the Gaza Strip" as "the most telling aspect of the non-termination of the occupation" (see Dinstein (footnote 81 above), p. 279, para. 670).

[90] Kolb and Vité argue that such situations would be covered by other legal regimes than the law of occupation, in particular human rights law (see footnote 71 above, p. 182).

[91] A. Gross, *The Writing on the Wall: Rethinking the International Law of Occupation*, Cambridge University Press, 2017. See also Gross, "Rethinking occupation: the functional approach", Opinio Juris (April 23, 2012), available from www.opiniojuris.org/2012/04/23/symposium-on-the-functional-approach; and T. Ferraro, "Determining the beginning and end of an occupation under international humanitarian law", *International Review of the Red Cross*, vol. 94, No. 885 (Spring 2012), pp. 139–163.

[92] ICRC, Commentary of 2016 to article 2 ... (see footnote 75 above), para. 307.

- the armed forces of a State are physically present in a foreign territory without the consent of the effective local government in place at the time of the invasion;
- the effective local government in place at the time of the invasion has been or can be rendered substantially or completely incapable of exerting its powers by virtue of the foreign forces' unconsented-to presence;
- the foreign forces are in a position to exercise authority over the territory concerned (or parts thereof) *in lieu* of the local government.[93]

24. This definition is reproduced here for information purposes. The Commission has not yet decided whether there is a need to address the use of terms in the context of the draft principles. Tentative definitions of "armed conflict" and "environment" were included in the preliminary report of the former Special Rapporteur.[94] Both definitions were based on the Commission's earlier work: the definition of an "armed conflict" as contained in the draft articles on the effects of armed conflicts on treaties,[95] and the definition of "environment" as per the draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities.[96] There is no similar precedent to be found in the Commission's earlier work as regards a definition of "occupation". It should also be pointed out that the definition of "armed conflict", if included, was originally intended to cover situations of occupation.[97]

25. The status of a territory as occupied is often disputed, including in situations in which the occupying State relies on a local surrogate, transitional government or rebel group for the purposes of exercising control over the occupied territory.[98] It is nevertheless widely acknowledged that the law of occupation applies to such cases provided that the local surrogate acting on behalf of a State exercises effective control over the occupied territory.[99] The possibility of such an "indirect occupation" has been acknowledged by the International Tribunal for the Former Yugoslavia, which has referred to circumstances, in which "the foreign Power 'occupies' or operates in certain territory solely through the acts of local de facto organs or agents".[100] The International Court of Justice, too, seems to have accepted in *Armed Activities on the Territory of the Congo* that Uganda would have been an occupying Power in the areas controlled and administered by Congolese rebel movements, had these non-state

[93] *Ibid.*, para. 304.

[94] Preliminary report of the Special Rapporteur, Ms. Marie Jacobsson, A/CN.4/674 and Corr.1, para. 78. ("armed conflict") and para. 86 ("environment").

[95] Draft articles on the effects of armed conflicts on treaties with commentaries thereto, *Yearbook ... 2011*, vol. II (Part Two), art. 2 (*b*), pp. 110–111.

[96] Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities with commentaries thereto, *Yearbook ... 2006*, vol. II, (Part Two), p. 64, principle 2 (*b*).

[97] The Commission considered "that it was desirable to include situations involving a state of armed conflict in the absence of armed actions between the parties. Thus the definition includes the occupation of territory which meets with no armed resistance" (*Yearbook ... 2011*, vol. II (Part Two), p. 110, paragraph (6) of the commentary to draft article 2.

[98] Roberts, "Prolonged military occupation ..." (see footnote 73 above), p. 95, and Dörmann and Gasser (see footnote 83 above), p. 272.

[99] Benvenisti, *The International Law of Occupation* (see footnote 86 above), p. 61–62. Similarly, ICRC, *Expert Meeting: Occupation and other Forms of Administration of Foreign Territory*, 2012, pp. 10 and 23 (the theory of "indirect effective control" was met with approval). See also *The Manual of the Law of Armed Conflict* (footnote 71 above), p. 276, para. 11.3.1 ("likely to be applicable"); Kolb and Vité (see footnote 71 above), p. 181; and ICRC, Commentary of 2016 to article 2 ... (see footnote 75 above), paras. 328–332.

[100] See *Prosecutor v. Duško Tadić a/k/a "Dule", Case No. IT-94-1-A, Opinion and Judgment of 7 May 1997*, Trial Chamber, International Tribunal for the Former Yugoslavia, para. 584. See also *Prosecutor v. Tihomir Blaškić, Case No. IT-95-14-T, Judgment of 3 March 2000*, Trial Chamber, International Tribunal for the Former Yugoslavia, paras. 149–150.

armed groups been "under the control" of Uganda.[101] Furthermore, the European Court of Human Rights has confirmed that the obligation of a State party to the Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention on Human Rights) to secure the rights and freedoms set out in the Convention in an area outside its national territory, over which it exercises effective control, "derives from the fact of such control, whether it be exercised directly, through its armed forces, or through a subordinate local administration".[102]

26. The law of occupation is applicable to all situations that fulfil the factual requirements of effective control of a foreign territory irrespective of whether the occupying State invokes the legal regime of occupation.[103] Such occasions have been rare.[104] While the State practice on the actual application of the law of occupation is thus limited to a handful of cases, the most prominent ones being the Occupied Palestine Territory since 1967 and Iraq between 2003 and 2004, there is a certain amount of case law from international and regional courts, including the International Court of Justice's advisory opinion on the *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*[105] and its judgment in the *Armed Activities on the Territory of the Congo* case, several judgments of the European Court of Human Rights concerning, *inter alia*, Northern Cyprus and Nagorno-Karabakh,[106] as well as decisions of the Ethiopia-Eritrea Claims Commission[107] and a number of post-World War II cases.[108] Still other situations have been qualified as occupation by the Security

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[101] *Armed Activities on the Territory of the Congo* (footnote 82 above), p. 231, para. 177. See also the separate opinion of Judge Kooijmans, *ibid.*, p. 317, para. 41.

[102] *Loizidou v. Turkey. Application No. 15318/89. Judgment (Merits) of 18 December 1996*, Grand Chamber, European Court of Human Rights, *Reports of Judgments and Decisions 1996-VI*, para. 52: "the responsibility of a Contracting Party could also arise when as a consequence of military action — whether lawful or unlawful — it exercises effective control of an area outside its national territory. The obligation to secure, in such an area, the rights and freedoms set out in the Convention, derives from the fact of such control, whether it be exercised directly, through its armed forces, or through a subordinate local administration".

[103] *The Hostages Trial: Trial of Wilhelm List and Others*: "[w]hether an invasion has developed into an occupation is a question of fact" (*Case No. 47*, United States Military Tribunal at Nuremberg, *Law Reports of Trial of War Criminals*, vol. VIII, London, United Nations War Crimes Commission, 1949, p. 55. See also *Armed Activities on the Territory of the Congo* (footnote 82 above), p. 230, para. 173; *Prosecutor v. Naletilić and Martinović* (see footnote 76 above), para. 211; and ICRC, Commentary of 2016 to article 2 ... (see footnote 75 above), para. 300.

[104] After analysing 14 different cases of occupations since the 1970s, Benvenisti concludes that, as a general rule, the law of occupation was not invoked by the occupant as the source of its authority (Benvenisti, *The International Law of Occupation* (see footnote 86 above), pp. 167–202). Another author has counted 19 cases of occupation meeting the criteria of The Hague Regulations between 1945 and 2006, see G. H. Fox, "Exit and military occupations", in R. Caplan (ed.), *Exit Strategies and State Building*, Oxford University Press, 2012, pp. 197–223.

[105] *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* (see footnote 77 above).

[106] See, for example, Loizidou v. Turkey, *Application No. 15318/89. Preliminary Objections. Judgment of 23 March 1995*, European Court of Human Rights, *Series A: Judgments and Decisions*, vol. 310, and *Judgment (Merits) of 18 December 1996* (footnote 102 above); Cyprus v. Turkey, *Application No. 25781/94. Judgment of 10 May 2001*, Grand Chamber, European Court of Human Rights, Reports of Judgments and Decisions 2001-IV, p. 1; and Chiragov and Others v. Armenia, *Application No. 13266/05. Judgment (Merits) of 16 June 2015*, Grand Chamber, European Court of Human Rights, Reports of Judgments and Decisions 2015.

[107] See, for example, Eritrea — Ethiopia Claims Commission, *Partial Award: Central Front — Eritrea's Claims 2, 4, 6, 7, 8 & 22* (footnote 74 above).

[108] See, for example, "*The Krupp Case*", *Case No. 10, Judgment of 31 July 1948*, United States Military Tribunal at Nuremberg, *Law Reports of Trial of War Criminals*, vol. IX, London, United Nations War Crimes Commission, 1950, p. 1340, *Prosecutor v. Hermann Wilhelm Göring* et al., *Judgment of 1 October 1946*, International Military Tribunal, *Trial of the Major War Criminals before the International Military Tribunal*, vol. 1, Nuremberg, 1947; and *Prosecutor v. E. W. Bohle* et al., *Judgment of 14 April 1949*, International Military Tribunal, *Trials of War*

Council or the General Assembly.[109] Reference is made in the following to such situations to the extent that they can shed light on the present topic. Furthermore, relevant practice of United Nations institutions is occasionally referred to.

B. Protection of the environment through property rights

27. The law of occupation is a specific subset of the law of armed conflict, which is generally considered to consist of the law of neutrality, the law of occupation and international humanitarian law.[110] The special rules concerning occupation are contained in The Hague Regulations of 1907 and in Part III, Section III of the Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV), entitled "Occupied territories". Moreover, by virtue of common article 2 of the Geneva Conventions for the protection of war victims, all four Conventions apply in their entirety to situations of occupation.[111] The Hague Regulations are considered to reflect customary international law,[112] and the four Geneva Conventions for the protection of war victims have been universally ratified.[113] The Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Protocol I) is applicable to situations of occupation as far as the States parties to it are concerned.[114]

28. The following consideration is limited to questions pertaining to the protection of the environment in situations of occupation and does not discuss other aspects of the law of occupation comprehensively. The specific provisions to be highlighted in connection with occupation relate, first, to property rights; second, to certain protected objects, and, third, to the general obligation of the occupying State to restore and maintain public order and safety in the occupied territory. While the underlying rationale of these provisions is to ensure property and exploitation rights and economic interests, or the survival and welfare of the civilian population, as the case may be, they provide indirect protection to the environment, too. A related evolution has taken place in the area of human rights law. In the jurisprudence of the Inter-

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Criminals Before the Nuremberg Military Tribunals under Control Council Law No. 10, vol. XIV, Washington D.C., United States Government Printing Office, 1952.

[109] See, for example, General Assembly resolutions 34/37 of 21 November 1979 and 35/19 of 11 November 1980 on the question of Western Sahara; General Assembly resolutions 37/6 of 28 October 1982 and 44/22 of 16 November 1989 on the situation in Kampuchea); Security Council resolutions 269 (1969) of 12 August 1969 and 276 (1970) of 30 January 1970 on the situation in Namibia); Security Council resolution 822 (1993) of 30 April 1993 on Nagorny Karabakh; Security Council resolution 853 (1993) of 29 July 1993 on Armenia/ Azerbaijan; and Security Council resolution 687 (1991) of 3 April 1991 on Iraq/Kuwait.

[110] The terms "law of armed conflicts" and "international humanitarian law" are nevertheless often used interchangeably.

[111] Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV), art. 2, para. 2: "The Convention shall also apply to all cases of partial or total occupation of the territory of a High Contracting Party, even if the said occupation meets with no armed resistance."

[112] *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* (see footnote 77 above), p. 172, para. 89, and *Armed Activities on the Territory of the Congo* (see footnote 82 above), pp. 243–244, para. 217. See also International Military Tribunal, *Trial of the Major War Criminals before the International Military Tribunal*, vol. XXII, Nuremberg, 1948, p. 497.

[113] See https://ihl-databases.icrc.org/applic/ihl/ihl-search.nsf/content.xsp.

[114] Article 1, paragraph 3, provides that the Protocol "shall apply in the situations referred to in Article 2 common to [the Geneva] Conventions".

American Court of Human Rights, the right to property has been tied to environmental protection, in particular concerning the lands of indigenous peoples.[115]

29. Today, some of the specific provisions on property rights contained in the law of occupation are generally seen to apply to natural resources conceived as "property within the occupied territory". This is, in particular, the case of article 55 of The Hague Regulations, which provides the primary basis for the occupying State's administration of the natural resources of the occupied territory. Article 55 lays down the so-called "usufructuary rule" concerning the limitations to the occupying State's use of immovable public property in the occupied territory: "The occupying State shall be regarded only as administrator and usufructuary of public buildings, real estate, forests, and agricultural estates belonging to the hostile State, and situated in the occupied country. It must safeguard the capital of these properties, and administer them in accordance with the rules of usufruct."

30. It is generally agreed that the reference to "public buildings, real estate, forests, and agricultural estates" in article 55 is not exhaustive but applies to all immovable public property that is not used for military purposes.[116] The Roman law concept of usufruct, which literally refers to the enjoyment of the fruits of a property, has been defined as the right to use assets belonging to others and to receive the proceeds from those assets without altering their substance.[117] In spite of the notion of "fruit", which could be seen as limitative, this right has traditionally been regarded as applicable to the exploitation of all kinds of natural resources, including non-renewable ones. The rules of usufruct have thus been seen to allow the occupying State to "lease or utilize public lands or buildings, sell the crops, cut and sell timber, and work the mines"[118] and make other uses of the "fruit" of local public property.

31. It has furthermore been recognized that the occupying State has certain obligations with regard to the protection of the natural resources of the occupied territory. According to Oppenheim, the occupying State "is ... prohibited from exercising his right in a wasteful or negligent way that would decrease the value of the stock and plant" and "must not cut down a whole forest unless the necessities of war compel him".[119] Von Glahn emphasizes that the occupying State "is not permitted to exploit immovable property beyond normal use, and may not cut more timber than was done in pre-occupation days".[120] According to Stone, the rules of usufruct forbid "wasteful or negligent destruction of the capital value, whether by excessive cutting or mining or other abusive exploitation, contrary to the rules of good husbandry".[121]

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[115] Indigenous and Tribal Peoples' Rights over their Ancestral Lands and Natural Resources: Norms and Jurisprudence of the Inter-American Human Rights System, OEA/Ser.L/V/II., Doc. 56/09, 30 December 2009, paras. 194 and 215.

[116] See, for example, *The Manual of the Law of Armed Conflict* (footnote 71 above), p. 303, para. 11.86.

[117] See Part II of the law relating to real rights, chapter VI "Of usufruct, use, and habitation", in T. MacKenzie, *Studies in Roman Law with Comparative Views of the Laws of France, England, and Scotland*, 2nd ed., Edinburgh and London, William Blackwood and Sons, 1880, pp. 181–182. For an evaluation of the rules of usufruct in civil law jurisdictions, see E. R. Cummings, "Oil resources in occupied Arab territories under the law of belligerent occupation", *Journal of International Law and Economics*, vol. 9, No. 3 (December 1974), pp. 533–593.

[118] E. H. Feilchenfeld, *The International Economic Law of Belligerent Occupation*, Washington D.C., Carnegie Endowment for International Peace, 1942, p. 55. See also L. Oppenheim, *International Law: a Treatise*, vol. II, *War and Neutrality*, 2nd ed., London, Longmans, Green and Co., 1912, p. 175; and G. von Glahn, *The Occupation of Enemy Territory: a Commentary on the Law and Practice of Belligerent Occupation*, Minneapolis, The University of Minnesota Press, 1957, p. 177. See, similarly, *The Manual of the Law of Armed Conflict* (footnote 71 above), p. 303.

[119] Oppenheim (see footnote above), p. 175.

[120] Von Glahn (see footnote 118 above), p. 177.

[121] J. Stone, *Legal Controls of International Conflict: a Treatise on the Dynamics of Disputes and War-Law*, London, Stevens and Sons Limited, 1954, p. 714.

Traditional literature, analysing activities up to and during the Second World War, maintains in general that the occupying State should use natural resources only to the extent of military necessity.[122]

32. In the 1970s, questions began to be raised as to the precise limits of the occupying State's legal rights regarding the exploitation of non-renewable resources, particularly oil. The debate centred on whether an occupying State is allowed to increase the production of the resource in question so that pre-occupation levels are exceeded, or to open up new mines or wells. Those who argued in the affirmative cited the enhancement of the value of the property,[123] the benefits of using new technology[124] or the needs of the local inhabitants.[125] In general, however, such activities were seen to go beyond the occupying State's competences as a temporary administrator.[126] While the question of increasing the exploitation of finite resources is not without environmental ramifications,[127] the main thrust of the debate was on resource allocation. More recently, however, and in tandem with the development of the general legal framework for the exploitation and conservation of natural resources, environmental considerations have attracted attention as an element of the occupying State's duty to "safeguard the capital". It has been argued that to comply with article 55, the occupying State would have to "assume control over natural resources in the area, protect them against over-use and pollution, and allocate them equitably and reasonably among the various domestic users",[128] or that the duties of the occupying State include "sustainable use of natural resources and environmental conservation".[129] These arguments are considered in more detail in chapter III.

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[122] See, for example, Feilchenfeld (footnote 118 above), p. 55–56, and M. S. McDougal and F. P. Feliciano, *Law and Minimum World Public Order: the Legal Regulation of International Coercion*, New Haven, Yale University Press, 1961, p. 823.

[123] A. Gerson, "Off-shore oil exploration by a belligerent occupant: the Gulf of Suez dispute", *American Journal of International Law*, vol. 71, No. 4 (October 1977), pp. 725–733.

[124] Dinstein (see footnote 81 above), p. 214; and R. D. Langenkamp and R. J. Zedalis, "What happens to the Iraqi oil? Thoughts on some significant, unexamined international legal questions regarding occupation of oil fields", *European Journal of International Law*, vol. 14, No. 3 (2003), pp. 417–435.

[125] Dinstein (see footnote 81 above), p. 216, para. 510.

[126] M. Leigh, "Department of State memorandum on law on Israel's right to develop oil fields in Sinai and the Gulf of Suez", *International Legal Materials*, vol. 16, No. 3 (1977), p. 733–753; B. M. Clagett and O. T. Johnson, Jr., "May Israel as a belligerent occupant lawfully exploit previously unexploited oil resources of the Gulf of Suez?", *American Journal of International Law*, vol. 72, No. 3 (1978), pp. 558–585; Cummings (footnote 118 above); A. Cassese, "Powers and duties of an occupant in relation to land and natural resources", *in* E. Playfair (ed.), *International Law and the Administration of Occupied Territories: Two Decades of Israeli Occupation of the West Bank and Gaza Strip*, Oxford University Press, 1992, pp. 419–442; and I. Scobbie, "Natural resources and belligerent occupation: perspectives from international humanitarian and human rights law" *in* S. Akram *et al.* (eds.), *International Law and the Israeli–Palestinian Conflict: a Rights-based Approach to Middle East Peace*, Abingdon, Routledge, 2011.

[127] For the environmental impact of the extractives industry, see the report of the Special Rapporteur on the human rights obligations related to environmentally sound management and disposal of hazardous substances and waste, Calin Georgescu (A/HRC/21/48). See also P. Lujala and S. Aas Rustad (eds.), *High-Value Natural Resources and Post-Conflict Peacebuilding*, Abingdon, Earthscan, 2012.

[128] Benvenisti, *The International Law of Occupation* (see footnote 86 above), p. 81. See also E. Benvenisti, "Water conflicts during the occupation of Iraq", *The American Journal of International Law*, vol. 97, No. 4 (October 2003), pp. 860–872, at p. 870. See, similarly, D. Dam-de Jong, *International Law and Governance of National Resources in Conflict and Post-Conflict Situations*, Cambridge University Press, 2015, p. 228–229.

[129] M. Bothe, "The administration of occupied territory", *in* A. Clapham, P. Gaeta and M. Sassòli (eds.) *The 1949 Geneva Conventions: a Commentary*, Oxford University Press, 2015, pp. 1455–1484, at p. 1467. See also B. Saul, "The Status of Western Sahara as occupied territory under international humanitarian law and the exploitation of natural resources", *Global Change, Peace and Security*, vol. 27, No. 3 (2015), pp. 301–322, at p. 319.

33. The principle of permanent sovereignty over natural resources also has a bearing on the interpretation of article 55. According to this principle, as enshrined in both the International Covenant on Civil and Political Rights[130] and the International Covenant on Economic, Social and Cultural Rights,[131] "[a]ll peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence". The principle has also been articulated in a number of General Assembly resolutions.[132] The International Court of Justice has confirmed its customary nature.[133] As for the meaning of the concept of permanent sovereignty over natural resources, it has undergone a similar development as the international law of natural resources in general with environmental concerns and sustainability winning ground in its interpretation.[134]

34. Some questions have been raised as to the applicability of the principle of permanent sovereignty over natural resources to situations of armed conflict and occupation, in particular in relation to the statement of the International Court of Justice in *Armed Activities on the Territory of the Congo* that it did not believe the principle to be applicable to "the specific situation of looting, pillage and exploitation of certain natural resources by members of the army of a State militarily intervening in another State".[135] It is not clear whether this statement should be interpreted to refer to situations of armed conflict and occupation in general,[136] or to the particular circumstances of the case, given that the looting in the occupied Ituri district of the Democratic Republic of Congo was not seen as based on a governmental policy.[137] The Security Council and General Assembly have invoked the principle of sovereignty over natural resources in relation to situations of armed conflict and occupation.[138] It would also be difficult to reconcile the non-applicability of the principle of permanent sovereignty in situations of occupation with the legal nature of occupation as a provisional administration that is not supposed to affect the

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[130] Art. 1, para. 2.

[131] Art. 1, para. (2).

[132] See General Assembly resolutions 1803 (XVII) of 14 December 1962, 3201 (S-VI) of 1 May 1974 (Declaration on the Establishment of a New International Economic Order) and 3281 (XXIX) of 12 December 1974 (Charter of Economic Rights and Duties of States).

[133] *Armed Activities on the Territory of the Congo* (see footnote 82 above), pp. 251–252, para. 244.

[134] See N. Schrijver, *Sovereignty over Natural Resources: Balancing Rights and Duties*, Cambridge University Press, 1997, pp. 120–140 and 368–395; and V. Barral, "National sovereignty over natural resources: environmental challenges and sustainable development", *in* E. Morgera and K. Kulovesi (eds.), *Research Handbook on International Law and Natural Resources*, Cheltenham, Edward Elgar, 2016, pp. 3–25, at p. 7.

[135] *Armed Activities on the Territory of the Congo* (see footnote 82 above), pp. 251–252, para. 244. See also the declaration of Judge Koroma, para. 11, arguing that "these rights and interests remain in effect at all times, including during armed conflict and occupation".

[136] As suggested by R. Pereira and O. Gough, "Permanent sovereignty over natural resources in the 21st century: natural resource governance and the right to self-determination of indigenous peoples under international law", *Melbourne Journal of International Law*, vol. 14, No. 2 (2013), pp. 451–495, at p. 463.

[137] N. Schrijver, "Natural resources, permanent sovereignty over", para. 18, *Max Planck Encyclopedia of Public International Law*, available from www.mpepil.com.

[138] See, for example, Security Council resolution 1291 (2000) of 24 February 2000 (on the situation in the Democratic Republic of the Congo), preamble, para. 4; General Assembly resolution 3336 (XXIX) of 17 December 1974 (Permanent sovereignty over national resources in the occupied Arab territories), para. 3; and General Assembly resolution 71/247 of 21 December 2016 (Permanent sovereignty of the Palestinian people in the Occupied Palestinian Territory, including East Jerusalem, and of the Arab population in the occupied Syrian Golan over their natural resources).

sovereignty of the territorial State. Furthermore, both States and peoples are beneficiaries of this principle.

35. Similarly, the principle of self-determination may be invoked in relation to the exploitation of natural resources in territories under occupation, particularly in the case of territories which are not part of any established State.[139] In its advisory opinion on the *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, the International Court of Justice stated that the construction of the wall, as well as other measures by the occupying State "severely impede the exercise by the Palestinian people of its right to self-determination".[140] The right to self-determination was also referred to in the Court's advisory opinions on *Legal Consequences for States of the Continued Presence of South Africa in Namibia*[141] and *Western Sahara*,[142] as well as in the *East Timor* case, in which the Court affirmed the *erga omnes* nature of the principle.[143] The merits of the *East Timor* case, on which the Court did not pronounce, notably concerned the lawfulness of a treaty regarding the exploitation of natural resources around the Timor Gap, which allegedly violated the right of self-determination and permanent sovereignty of East Timor over its wealth and natural resources.[144]

36. Issues regarding the utilization and protection of water resources have been raised recurrently in relation to situations of occupation in the past few decades. This is not surprising given that the two most reported situations of occupation, Occupied Palestinian Territory since 1967 and Iraq between 2003 and 2004, are both located in an area that suffers from significant water stress.[145] While the thrust of the legal comments has been on equitable distribution of and access to water,[146] questions related to sustainability and the protection of water resources have also been raised.[147] The ownership of natural resources may be public or private as determined by the national legislation of the occupied country. Article 55 of The Hague Regulations is relevant in this context insofar as water resources are classified as public immovable property. As to the status of water as movable or immovable property, the established view seems to be that freshwater resources in rivers, lakes, wetlands and aquifers are immovable property.[148] Pursuant to article 55, the occupying State, as usufructuary, would be required to prevent overexploitation of the assets and to maintain their long-term value.[149] The principle of permanent sovereignty over natural resources can

[139] Such as non-self-governing territories, see Article 73 of the Charter of the United Nations.

[140] *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* (see footnote 77 above), para. 122.

[141] *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (1970), Advisory Opinion, I.C.J. Reports 1971*, p. 16, at pp. 31–32, paras. 52–53.

[142] *Western Sahara, Advisory Opinion, I.C.J. Reports 1975*, p. 12, at pp. 32–33, paras. 56–59.

[143] *East Timor (Portugal v. Australia), Judgment, I.C.J. Reports 1995*, p. 90, at p. 102, para. 29.

[144] *Ibid.*, p. 104, para. 33.

[145] H. Tropp and A. Jägerskog, *Water Scarcity Challenges in the Middle East and North Africa (MENA)*, Stockholm, International Water Institute, 2006.

[146] G. Abouali, "Natural resources under occupation: the status of Palestinian water under international law", *Pace International Law Review*, vol. 10, No. 2 (Fall 1998), pp. 411–574; Scobbie (see footnote 126 above); and A. Abu-Eid, "Water as a human right: the Palestinian Occupied Territories as an example", *International Journal of Water Resources Development*, vol. 23, No. 2 (June 2007), pp. 285–301.

[147] UNEP, *Desk Study on the Environment in the Occupied Palestinian Territories* (see footnote 58 above), pp. 10–11; and Benvenisti, "Water conflicts during the occupation of Iraq" (see footnote 128 above), p. 868.

[148] H. Dichter, "The legal status of Israel's water policies in the Occupied Territories", *Harvard International Law Journal*, vol. 35 (1994), pp. 565–594, p. 582; and Cassese (see footnote 126 above), p. 426.

[149] Dichter (see footnote above), p. 577. See also the Berlin Rules on Equitable Use and Sustainable Development of Waters, International Law Association, *Report of the Seventy-First Conference, Berlin, 16–21 August 2004*, London, 2004, p. 334, art. 54.

likewise be evoked in this context as underscoring the duty of the occupying State to protect the water resources so that their quality or quantity is not seriously impaired.

37. In general, seizure and exploitation of property is permitted only to the extent required to cover the expenses of the occupation, and "these should not be greater than the economy of the country can reasonably be expected to bear".[150] A further limitation to the exploitation of the wealth and natural resources of the occupied territory derives from the nature of occupation as temporary, non-sovereign administration of the territory and prevents the occupying State from using the resources of the occupied country or territory for its own domestic purposes.[151] As summarized by the Institute of International Law, "the occupying power can only dispose of the resources of the occupied territory to the extent necessary for the current administration of the territory and to meet the essential needs of the population".[152] Similarly, the United Kingdom and the United States emphasized in their communication to the Security Council in May 2003 that the States participating in the coalition would "act to ensure that Iraq's oil is protected and used for the benefit of the Iraqi people".[153] Reference can also be made to the *Armed Activities on the Territory of the Congo* case, in which the Court referred to the principle that exploitation of natural resources for the benefit of the local population was permitted under humanitarian law.[154]

38. As was pointed out earlier, the protection given to property under The Hague Regulations varies according to whether the property in question is public or private, movable or immovable. Public movable property is covered by article 53, paragraph 1, of The Hague Regulations, according to which "[a]n army of occupation can only take possession of cash, funds, and realizable securities which are strictly the property of the State, depots of arms, means of transport, stores and supplies, and, generally, all movable property belonging to the State which may be used for military operations". Subject to the general limitations described above, the occupying State can freely seize and dispose of public movable property provided that it can be used for military operations. Views differ, however, as to whether this provision is limited to property that is susceptible to direct military use[155] or whether it extends to property that serves military purposes only indirectly, for instance when converted to money.[156] While the formulation of article 53, paragraph 1, does not contain any reference to natural resources, it has generally been seen to cover, for instance, crude oil that is extracted from the soil. Whether other extractable resources, once extracted, may be qualified as movable property in the sense of article 53, paragraph 1, depends on how the necessary connection to military operations is defined. Extractable resources are

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[150] *Prosecutor v. Hermann Wilhelm Göring* et al. (see footnote 108 above), p. 239.

[151] Singapore, Court of Appeal, N.V. *de Bataafsche Petroleum Maatschappij and Others v. The War Damage Commission*, 13 April 1956, Reports: 1956 Singapore Law Reports, p. 65; reprint in *International Law Reports*, vol. 23 (1960), pp. 810–849, p. 822 (*Singapore Oil Stocks* case); and *"The Krupp Case"* (see footnote 108 above), p. 1340.

[152] *Institut de Droit International*, Bruges Declaration on the use of force, September 2, 2003.

[153] S/2003/538 (8 May, 2003). See also Security Council resolution 1483 (2003), para. 20, in which the Security Council required that "all proceeds from [oil] sales shall be deposited into the Development Fund for Iraq until such time as an internationally recognized, representative government of Iraq is properly constituted".

[154] *Armed Activities on the Territory of the Congo* (see footnote 82 above), p. 253, para. 249.

[155] Stone (see footnote 121 above), p. 715. Similarly, Cummings (see footnote 118 above), pp. 575–578, referring to national war crime trials; and Cassese (see footnote 126 above), p. 428. See also J. G. Stewart, *Corporate War Crimes: Prosecuting Pillage of Natural Resources*, Open Society Justice Initiative, Open Society Foundation, 2011, pp. 55–56, referring to the negotiating history of the provision to support the former view.

[156] Oppenheim (see footnote 118 above), p. 176, para. 137; von Glahn (see footnote 118 above), p. 181; McDougal and Feliciano (see footnote 122 above), p. 813; and Dinstein (see footnote 81 above), p. 219, para. 517.

in general seen as immovable property as long as they are still underground,[157] but there is some controversy as to the status of underground crude oil as movable or immovable property.[158]

39. Private property under occupation enjoys considerably stronger protection and may not, in general, be confiscated or seized.[159] Article 53, paragraph 2, of The Hague Regulations, which allows the seizure of, *inter alia*, "all kinds of munitions of war", applies both to public and private property but it is widely acknowledged that to qualify as "munitions of war" property must be of a nature susceptible to direct military use.[160] Other exceptions to the general rule include temporary seizure of private immovable property for military purposes and requisition of movable property for the needs of the army of occupation.[161] The first of these two exceptions, seizure of immovable property for quartering of troops or military exercises, may have an adverse environmental impact.[162] Otherwise the protection of private property, including natural resources, under the law of occupation can have an important protective function preventing excessive or indiscriminate exploitation that could cause serious environmental harm.[163]

40. A further limitation that provides protection to natural resources as well as to certain other components of the environment is contained in the general prohibition of destruction or seizure of property, whether public or private, movable or immovable, in the occupied territory unless such destruction or seizure is rendered absolutely necessary by military operations.[164] An "extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly" is defined as a grave breach in articles 53 and 147 of the Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV) and as a war crime of "pillage" in the Rome Statute of the International Criminal Court.[165]

41. There is a considerable body of State practice and jurisprudence concerning the application of the rules on pillage. While most cases concerning pillage (looting or spoliation) address appropriation of private movable property, artefacts or destruction

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[157] *Affaire du Guano (Chili, France), Award of 5 July 1901*, UNRIAA, vol. XV, pp. 77–387, at p. 367.

[158] *Singapore Oil Stocks* case (see footnote 151 above, pp. 823–824), supports the position that underground crude oil is immovable property. Similarly: Cummings (see footnote 118 above), p. 558–559; Cassese (see footnote 126 above), p. 426; Y. Arai-Takahashi, *The Law of Occupation: Continuity and Change of International Humanitarian Law and its Interaction with International Human Rights law*, Leiden, Brill, 2009, p. 212. Differently: Dinstein (see footnote 81 above), pp. 216–217, para. 512; and *The Manual of the Law of Armed Conflict* (see footnote 71 above), para. 11.81.1, p. 301.

[159] Article 46 of The Hague Regulations.

[160] For the negotiation history, see E. Lauterpacht, "The Hague Regulations and the seizure of *munitions-de-guerre*", *British Yearbook of International Law*, vol. 32 (1955), pp. 218–226. See also *Singapore Oil Stocks* case (see footnote 151 above), pp. 822-823; *Prosecutor v. Naletilić and Martinović* (see footnote 76 above), para. 616; *Prosecutor v. Martić, Case No. IT-95-11-T, Judgment of 10 June 2007*, para. 102; Leigh (footnote 126 above); and *United States Department of Defense Law of War Manual* (see footnote 83 above), sect. 11.18.6.2, p. 795.

[161] Article 52 of The Hague Regulations.

[162] See, for example, Shelton and Cutting (footnote 61 above), pp. 206–213. Reference can also be made to United Nations documents dealing with environmental issues commonly faced in field operations. See, for instance, Department of Field Support, *Environment Strategy* (April 2017) and *Environmental Policy for UN Field Missions* (June 2010), Ref. 2009.6.

[163] For examples of such harm, see UNEP, *The Democratic Republic of the Congo. Post-Conflict Environmental assessment. Synthesis for Policy-makers* (UNEP 2012).

[164] Article 23 (g) of The Hague Regulations and article 53 of the Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV).

[165] Art. 8, para. (2)(a)(iv) and (b)(xiii).

of houses, there is a certain amount of case law on pillage during occupations that addresses specifically natural resources and the environment, including a number of post-World War II cases.[166] More recently, the invasion and occupation of Kuwait by Iraq, in particular the attacks on oil wells, led to widespread environmental destruction that was documented, assessed and adjudicated by the United Nations Compensation Commission.[167] Furthermore, the International Court of Justice found in the *Armed Activities on the Territory of the Congo* case that Uganda was not only internationally responsible for acts of looting, plundering and exploitation of the natural resources committed by members of its armed forces in the territory of the Democratic Republic of the Congo, but also "for violating its obligation of vigilance in regard to these acts and ... in respect of all acts of looting, plundering and exploitation of natural resources in the occupied territory".[168] This notably extended to "violations of human rights and international humanitarian law by other actors present in the occupied territory, including rebel groups acting on their own account".[169]

42. Moreover, the Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Protocol I) prohibits the destruction, removal and disablement of civilian objects indispensable to the survival of the civilian population, "such as foodstuffs, agricultural areas ... crops, livestock, drinking water installations and supplies and irrigation works, for the specific purpose of denying them for their sustenance value to the civilian population or to the adverse party".[170] The fundamental purpose of this provision is to protect the civilian population and to prevent policies that could starve out civilians or cause them to move away. The list of protected objects is nevertheless illustrative, and should, according to the ICRC Commentary, be interpreted in the widest sense, "in order to cover the infinite variety of needs of populations in all geographical areas".[171] The provision can therefore be interpreted to protect the environment in general, including the quality of water, soil, air and healthy ecosystems, to the extent that civilian populations depend on it.[172] For instance,

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[166] *"The Krupp Case"* (see footnote 108 above), p. 1337–1372; and *U.S.A. v. von Weizsäcker et al. (Ministries case), Trials of War Criminals before the Nürnberg Military Tribunals*, vol. XIV, p. 741.

[167] S/RES/687 (1991); C. R. Payne, "Legal liability for environmental damage: the United Nations Compensation Commission and the 1990–1991 Gulf War", *in* C. Bruch, C. Muffett and S. S. Nichols (eds.), *Governance, Natural Resources and Post-Conflict Peacebuilding*, Abingdon, Routledge, 2016, pp. 719–760. See also A. Roberts, "Environmental issues in international armed conflict: the experience of the 1991 Gulf War", in R. J. Grunawalt, J. E. King and R. S. McClain (eds.), *Protection of the Environment During Armed Conflicts*, International Law Studies, vol. 69, Newport RI, Naval War College, 1996, pp. 222–277.

[168] *Armed Activities on the Territory of the Congo* (see footnote 82 above), p. 253, para. 250.

[169] *Ibid.*, p. 231, para. 179. See also *The Final Report of the Timor-Leste Commission for Reception, Truth and Reconciliation* (January 2006), Part 7.9, Economic and Social Rights, paras. 48–49, for the damage caused to soil and water resources by excessive exploitation of forests during the Indonesian occupation, available from www.chegareport.net.

[170] Article 54, paragraph 2, reads as follows: "It is prohibited to attack, destroy, remove or render useless objects indispensable to the survival of the civilian population, such as foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works, for the specific purpose of denying them for their sustenance value to the civilian population or to the adverse Party, whatever the motive, whether in order to starve out civilians, to cause them to move away, or for any other motive."

[171] ICRC Commentary to Additional Protocol I, art. 54(2), paras. 2102–2013, available from www.icrc.org.

[172] United Nations Environmental Assembly, resolution on Environment and Health, UNEP/EA.3/Res.4, para. 5, mentions air, marine, water and soil pollution, chemicals exposure, waste management, climate change and loss of biodiversity as environmental challenges that affect health.

non-military acts that lead to serious degradation of water resources during occupation could be understood to fall under "removing or rendering useless" drinking water installations or supplies.[173]

C. Protection of the environment through other rules of the law of occupation

43. The competences of the occupying State are also curtailed by the duty to restore and maintain public order and civil life in the occupied territory. According to article 43 of The Hague Regulations, "[t]he authority of the legitimate power having in fact passed into the hands of the occupant, the latter shall take all the measures in his power to restore, and ensure, as far as possible, public order and safety, while respecting, unless absolutely prevented, the laws in force in the country". The authentic French text of article 43 uses the expression "*l'ordre et la vie publics*" and the provision has been accordingly interpreted to refer not only to physical safety but also to the "social functions and ordinary transactions which constitute daily life, in other words to the entire social and economic life of the occupied region".[174] Furthermore, this interpretation is supported by the *travaux préparatoires*.[175] Article 64 of the Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV) adds certain specifications as to the meaning of the expression "unless absolutely prevented". According to the article, local laws may be changed when it is essential (a) to enable the occupying State to fulfil its obligations under the Convention, (b) to maintain the orderly government of the territory or (c) to ensure the security of occupying forces or administration.[176]

44. These provisions embody the so-called "conservationist principle" underlining the need for maintaining the *status quo ante*, which is at the core of the law of occupation. They also exemplify the nature of the law of occupation as both permissive and prohibitive.[177] In spite of the strict wording "unless absolutely prevented" of article 43, and the reference to an "essential" need in article 64, the relevant provisions have been interpreted to allow the occupying State the competence to legislate when necessary for the maintenance of public order and civil life and to change legislation that is contrary to established human rights standards.[178]

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[173] Berlin Rules on Equitable Use and Sustainable Development of Waters (see footnote 149 above), art. 54 para. 2. See also *A Matter of Survival: Report of the Global High-Level Panel on Water and Peace*, 2017, p. 22, clarifying the notion of "water installations", which "in practice tend to refer to larger entities that are vital in preventing the starvation of civilians".

[174] McDougal and Feliciano (see footnote 122 above), p. 746. See also Dinstein (see footnote 81 above), p. 89, para. 203.

[175] In the Brussels Conference of 1874, the term "*vie publique*" was interpreted as "*des fonctions sociales, des transactions ordinaires qui constituent la vie de tous les jours*". This interpretation by the Belgian delegate was endorsed by the relevant Commission. See Ministère des Affaires Etrangères de Belgique, *Actes de la Conférence de Bruxelles de 1874*, p. 110, available from https://babel.hathitrust.org/.

[176] The Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV), art. 64, referring to the penal laws of the occupied territory. This article has nevertheless been interpreted so as to apply to all local legislation. See M. Sassòli, "Legislation and maintenance of public order and civil life by occupying Powers", *European Journal of International Law*, vol. 16, No. 4 (2005), pp. 661–694, at p. 669; Dinstein (see footnote 81 above), p. 111; Benvenisti, *The International Law of Occupation* (see footnote 86 above), p. 101; and Kolb and Vité (see footnote 71 above), p. 192–194.

[177] Roberts, "Prolonged military occupation..." (see footnote 73 above), p. 46.

[178] Sassòli, "Legislation and maintenance of public order and civil life by occupying Powers" (see footnote 176 above), p. 663. According to *The Manual of the Law of Armed Conflict*, new legislation may be necessitated by the exigencies of armed conflict, the maintenance of order, or the welfare of the population (see footnote 71 above, p. 284, para. 11.25). Similarly, McDougal and Feliciano (see footnote 122 above), p. 757.

Pictet qualifies the occupying State's legislative powers as "very extensive and complex",[179] pointing out that "some changes might conceivably be necessary and even an improvement" and explaining that the object of the text in question was "to safeguard human beings and not to protect the political institutions of government machinery of the State as such".[180]

45. It is furthermore evident that "civil life" and "orderly government" are evolving concepts, comparable to the notions of "well-being and development", or "sacred trust" which the International Court of Justice described in its advisory opinion on the *Legal Consequences for States of the Continued Presence of South Africa in Namibia* as "by definition evolutionary".[181] The concrete content of the occupying State's duty to ensure public life and order, as stated by the Supreme Court of Israel, can "not be that of public life and order in the nineteenth century".[182] While there are differing views as to the limits of the authority of the occupying State to prescribe and create changes in the legislation and institutions of the occupied territory, most authors seem to recognize that some forward-looking action is needed to ensure the well-being of the population.[183] The longer the occupation lasts, the more evident is the need for some changes so as to avoid stagnation and to allow the occupying State to fulfil its duties under the occupation law.[184] It is to be recalled in this respect that

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[179] ICRC Commentary to the Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV), art. 47, p. 335, available from www.icrc.org. According to Greenwood, the occupying State has a duty to establish an effective administration in occupied territory, see C. Greenwood, "The administration of occupied territory in international law", *in* E. Playfair (ed.), *International Law and the Administration of Occupied Territories: Two Decades of Israeli Occupation of the West Bank and Gaza Strip*, Oxford University Press, 1992, p. 265; for Benvenisti, the occupant can "create changes in a wide spectrum of affairs" ("Water conflicts during the occupation of Iraq" (see footnote 128 above), p. 867).

[180] ICRC Commentary to the Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV) (see footnote 179 above), art. 47, p. 274.

[181] *Legal Consequences for States of the Continued Presence of South Africa in Namibia* (see footnote 141 above), pp. 31–32, para. 53. Similarly *Aegean Sea Continental Shelf (Greece v. Turkey), Judgment, 19 December 1978, I.C.J. Reports 1978*, p. 3, para. 77, in which the Court stated that the meaning of certain generic terms was "intended to follow the evolution of the law and to correspond with the meaning attached to the expression by the law in force at any given time". See also *US-Import Prohibition of Certain Shrimp and Shrimp Products (Complaint by India et al.)* (1998), World Trade Organization document WT/DS58/AB/R (Appellate Body Report), para. 129, according to which the expression "exhaustible natural resources" had to be interpreted in light of contemporary concerns about the protection and conservation of the environment (available from https://docs.wto.org); *Iron Rhine ("Ijzeren Rijn") Railway, Belgium v. the Netherlands, Award of 24 May 2005*, Permanent Court of Arbitration, UNRIAA, vol. XXVII, pp. 35–131, paras. 79–81. See also the Commission's work on "Subsequent agreements and subsequent practice", commentary to draft conclusion 3, "Interpretation of treaty terms as capable of evolving over time", *Official Records of the General Assembly, Sixty-eighth Session, Supplement No. 10* (A/68/10), para. 39.

[182] *A cooperative Society Lawfully Registered in Judea and Samaria Region vs. commander of the IDF Forces in the Judea and Samaria Region* et al., H.C. 393/82, 37(4) Piskei Din (Reports of the Israel Supreme Court), 785, partly reprinted in *Israel Yearbook on Human Rights*, vol. 30 (1984), pp. 301–313.

[183] Feilchenfeld pointed to the need, "if the occupation lasts through several years", to modify tax legislation, noting that "[a] complete disregard of these realities may well interfere with the welfare of the country and ultimately with 'public order and safety' as understood in Article 43" ((see footnote 118 above), p. 49). Similarly, McDougal and Feliciano (see footnote 122 above), p. 746. See also ICRC, *Expert Meeting* ... (footnote 100 above), p. 58, stressing the ability of the occupant to legislate to fulfil its obligations under the Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV) or to enhance civil life in the occupied territory. Sassòli, "Legislation and maintenance of public order and civil life by occupying Powers" (see footnote 176 above), p. 676, however, holds that the occupant should "only introduce as many changes as is absolutely necessary under its human rights obligations".

[184] ICRC, *Expert Meeting* ... (see footnote 100 above), p. 68; and Kolb and Vité (see footnote 71 above), p. 194.

the occupying State is expected to administer the occupied territory for the benefit of the occupied population.[185] The occupying State's general obligation under article 43 has in this sense been explained as "an obligation to ensure that the occupied population lives as normal a life as possible".[186]

46. While some active interference in the economic and social life of the occupied territory may thus be required, the occupying State shall be guided by a limited set of considerations: the concern for public order, civil life and welfare in the occupied territory. Most notably, the occupying State is not allowed to modify the local legislation according to its own ideals,[187] and may not introduce permanent changes in fundamental institutions of the occupied territory.[188] "Transformative occupation" is in this sense a controversial concept.[189] There is nevertheless always a certain tension between the conservationist principle, on the one hand, and the forward-looking action that may be required of the occupying State so as to avoid stagnation, on the other. Even a stable occupation remains an exceptional situation because of its coercive nature, and the occupying State is not supposed to take over the role of a sovereign legislator. The conservationist principle sets the general limits to the occupying State's competences in the occupied territory and has to be taken into account in applying more specific rules of the law of occupation. It also conditions the way in which international human rights law and international environmental law may complement the specific law of occupation rules in situations of occupation.

47. The obligation of the occupying State to ensure that the occupied population can continue to live as normally as possible under the circumstances has an obvious connection to the protection of the environment, given that environmental protection is widely recognized as belonging to the core functions of a modern State.[190] The part of the provision regarding the restoration and maintenance of public order is particularly important in periods of instability, also from the point of view of preventing and suppressing acts that may cause environmental damage, such as the acts of sabotage against water networks and pumping stations which, according to UNEP, continued in Iraq during and after the occupation of 2003–2004.[191] The more protracted the occupation, the more diversified measures are likely to be required of the occupying State for addressing environmental problems.

48. A further pertinent question is related to the institutional collapse that is often an inevitable side effect of an armed conflict. Under what circumstances can institutional rebuilding be seen as absolutely necessary? It has been pointed out that

[185] T. Ferraro, "The law of occupation and human rights law: some selected issues", in R. Kolb and G. Gaggioli (eds.), *Research Handbook on Human Rights and Humanitarian Law*, Cheltenham, Edward Elgar, 2013, pp. 273–293; *The Jerusalem District Electricity Company Ltd. v. (a) Minister of Energy and Infrastructure, (b) Commander of the Judea and Samaria Region* 35(23), H.C. 351/80, Piskei Din 673, partly reprinted in *Israel Yearbook on Human Rights* (1981), pp. 354–358.

[186] Ferraro, "The law of occupation and human rights law..." (see footnote above), p. 279.

[187] ICRC Commentary to the Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV) (see footnote 179 above), p. 337, para. 2 (c); and Sassòli, "Legislation and maintenance of public order and civil life by occupying Powers" (see footnote 176 above), p. 671. See also A. Roberts, "Transformative military occupation: applying the laws of war and human rights", *American Journal of International Law*, vol. 100 (2006), pp. 580–622.

[188] Feilchenfeld (see footnote 118 above), p. 89.

[189] Transformative occupation can be described as "an operation whose main objective is to overhaul the institutional and political structures of the occupied territory", see ICRC, *Expert Meeting* ... (footnote 100 above), p. 67. It is distinct from State-building operations authorized by the Security Council that may entail far-reaching changes in the legislation and institutions of the target country.

[190] K. Conca, *An Unfinished Foundation: the United Nations and Global Environmental Governance*, Oxford University Press, 2015, p. 108.

[191] UNEP, *Desk Study on the Environment in Iraq* (see footnote 58 above), p. 71.

the institutional consequences of armed conflicts have generally done "more lasting damage to the environment than the direct physical effects of war".[192] UNEP made it clear in its 2003 report on Iraq that the country's institutions for environmental governance at national, governorate and local levels had to be rebuilt in order to be able to properly address environmental problems in Iraq. The Coalition Provisional Authority, representing the occupying States, took certain steps in this direction. It created, for instance, an interim Governing Council which quickly appointed a new cabinet including a Minister of Environment,[193] a measure that was seen as crucial for addressing the environmental challenges in the post-conflict Iraq in a long-term and sustainable manner.[194] It should be recalled, however that the occupying States in this particular case could also rely on the explicit request of the Security Council to "promote the welfare of the Iraqi people through the effective administration of the territory".[195]

49. The requirement that the occupying State respect the laws and institutions of the occupied country also deserves attention as a safeguard for the environment. The extent to which it may provide protection to the environment depends on how effectively the environment and natural resources are protected in national legislation. It may be assumed that most States, if not all, have introduced laws and regulations pertaining to the protection of the environment.[196] Environmental rights have been recognized at national level in the constitutions of more than a hundred States.[197] Major multilateral environmental agreements have moreover attracted a high number of ratifications, which makes it likely that either the occupied State or the occupying State or both are parties to them.[198] Especially when incorporated in the legislation of the occupied State, such conventions would be covered by the obligation of the occupying State to respect the laws and institutions of the occupied territory. Multilateral environmental agreements and the governing bodies established by them

[192] Conca (see footnote 190 above), p. 95.

[193] UNEP, *Environment in Iraq: UNEP Progress Report* (see footnote 58 above), p. 29.

[194] *Ibid.*, p. 2.

[195] S/RES/1483(2003), para. 4.

[196] UNEP has listed more than 1,100 examples of national environmental legislation, see www.ecolex.org.

[197] There are nevertheless considerable variations in how the respective rights and duties are conceived, see P. Sands and J. Peel, *Principles of International Environmental Law*, 4th ed., Cambridge University Press, 2018, p. 816. A list of relevant constitutions is available from http://earthjustice.org/sites/default/files/library/reports/2008-environmental-rights-report.pdf, Appendix.

[198] Such as the 1972 Convention for the protection of the world cultural and natural heritage (193 ratifications); the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (193 ratifications); the 1971 Convention on Wetlands of International Importance especially as Waterfowl Habitat (197 ratifications), the Vienna Convention for the Protection of the Ozone Layer (197 ratifications); the Montreal Protocol on Substances That Deplete the Ozone Layer (197 ratifications); the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (186 ratifications); the United Nations Framework Convention on Climate Change (197 ratifications); the Kyoto Protocol (192 ratifications); the Paris Agreement (173 ratifications); the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (197 ratifications); the Convention on Biological Diversity (196 ratifications); the Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity (104 ratifications); the 2000 Cartagena Protocol on Biosafety (171 ratifications); the Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (160 ratifications); the Convention on Persistent Organic Pollutants (182 ratifications); the Convention on the Conservation of Migratory Species of Wild Animals (126 ratifications); the Minamata Convention on Mercury (85 ratifications); the Convention on Early Notification of a Nuclear Accident (121 ratifications); and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (115 ratifications).

may furthermore play a special role in crisis and post-conflict situations, in which States parties encounter difficulties in ensuring protection for the environment.[199]

50. The Special Rapporteur submits that the occupying State has a general obligation to respect the environment of the occupied territory and to take environmental considerations into account in the administration of such territory. The obligation to respect the environment of the occupied territory can be based on the general thrust of occupying State's obligation to take care of the welfare of the occupied population, derived from article 43 of The Hague Regulations. The obligation to ensure that the occupied population lives as normal a life as possible in the prevailing circumstances[200] should be interpreted to entail environmental protection as a widely recognized public function of the modern State. Moreover, environmental concerns can be said to relate to an essential interest of the territorial sovereign,[201] which the occupying State as a temporary authority must respect. The existence of such a general obligation is also supported by human rights law, as is discussed in chapter II. There is a close link between key human rights, such as the rights to food, health and life, on the one hand, and the protection of the quality of the soil and water, and even biodiversity[202] to ensure viable and healthy ecosystems, on the other.

II. Protection of the environment in situations of occupation through international human rights law

A. Complementarity between the law of occupation and international human rights law

51. It is widely recognized that international human rights law continues to apply in armed conflicts and in situations of occupation. The International Court of Justice confirmed in its advisory opinion on the *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* the applicability of both the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights as well as the Convention on the Rights of the Child to the Occupied Palestinian Territory.[203] According to the well-known formulation of the Court, [T]he protection offered by human rights conventions does not cease in case of armed conflict, save through the effect of provisions for derogation of the kind to be found in Article 4 of the International Covenant on Civil and Political Rights. As regards the relationship between international humanitarian law and human rights law, there are thus three possible situations: some rights may be exclusively matters of international humanitarian law; others may be exclusively matters of human rights law; yet others may be matters of both these branches of international law. In order to answer the question put to it, the Court will have to take into consideration both

[199] See B. Sjöstedt, *Protecting the Environment in Relation to Armed Conflict: the Role of Multilateral Environmental Agreements*, Lund University, 2016, pp. 221–227; and Sjöstedt, "The ability of environmental treaties to address environmental problems in post-conflict", *in* C. Stahn, J. Iverson and J. S. Easterday (eds.), *Environmental Protection and Transitions from Conflict to Peace*, Oxford University Press, 2017, pp. 73–92.

[200] Ferraro, "The law of occupation and human rights law..." (see footnote 185 above), p. 279.

[201] *Case Concerning the Gabčikovo–Nagymaros Project (Hungary v. Slovakia), Judgment, I.C.J. Reports 1997*, p. 7, para. 53.

[202] See World Health Organization, *Our Planet, Our Health, Our Future: Human Health and the Rio Conventions: Biological Diversity, Climate Change and Desertification*, Discussion Paper (2012), p. 2, acknowledging the role of biodiversity as the "foundation for human health". Available from www.who.int/globalchange/publications/reports/health_rioconventions.pdf.

[203] *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* (see footnote 77 above), pp. 178–181, paras. 107–113.

these branches of international law, namely human rights law and, as *lex specialis*, international humanitarian law.[204]

52. The Court confirmed in *Armed Activities on the Territory of the Congo* that international human rights instruments are applicable in respect of acts done by a State in the exercise of its jurisdiction outside its own territory, "particularly in occupied territories".[205] The applicability of human rights law during occupation has been further recognized by regional courts[206] as well as by the Human Rights Committee and the Committee on Economic, Social and Cultural Rights,[207] and has been largely endorsed in scholarly writings.[208]

53. The Human Rights Committee has stated that the protection of the rights under the International Covenant on Civil and Political Rights, once accorded, devolves with territory and continues to belong to the people, notwithstanding any changes in the administration of that territory.[209] This principle is in line with the requirement that the occupying State respect the laws and institutions of the occupied territory insofar as they do not conflict with established human rights standards. In general, the occupying State is also bound by its own human rights obligations, and by customary international law. It is recalled that the International Court of Justice determined that the obligations of Israel under the International Covenant on Civil

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[204] *Ibid.*, p. 178, para. 106.

[205] *Armed Activities on the Territory of the Congo* (see footnote 82 above), pp. 242–243, para. 216. See also paragraph 345 (3), in which the Court seems to imply that human rights apply differently in armed conflict and in situations of occupation; and Dinstein (footnote 81 above), p. 88, para. 200.

[206] See, for example, the European Court of Human Rights: *Loizidou v. Turkey, Preliminary Objections, Judgment of 23 March 1995* (footnote 106 above), para. 62, and *Judgment (Merits) of 18 December 1996* (footnote 102 above), para. 52; *Cyprus v. Turkey* (footnote 106 above), p. 25, para. 77; *Al-Skeini and others v. United Kingdom, Application No. 55721/07, Judgment of 7 July 2011*, para. 94, in which reference was made to the Inter-American Court of Human Rights case *Mapiripán Massacre v. Colombia, Judgment of 15 September 2005, Series C., No. 134*, in support of the duty to investigate alleged violations of the right to life in situations of armed conflict and occupation.

[207] Human Rights Committee, CCPR General Comment No. 26: Continuity of Obligations, 8 December 1997, CCPR/C/21/Rev.1/Add.8/Rev.1, para. 4; CCPR General Comment No. 29: Article 4: Derogations during a State of Emergency, 31 August 2001, CCPR/C/21/Rev.1/Add.11, para. 3; General Comment No. 31, Nature of the General Legal Obligation Imposed on States Parties to the Covenant, 26 May 2004, CCPR/C/21/Rev.1/Add. 13, para. 10. See also Committee on Economic, Social and Cultural Rights, Concluding observation: Israel, E/C.12/1/Add.69, 31 August 2001; and Concluding observation: Israel, E/C.12/ISR/CO/3, 16 December 2011 as well as the report on the situation of human rights in Kuwait under Iraqi occupation, prepared by Mr. Walter Kälin, Special Rapporteur of the Commission on Human Rights, in accordance with Commission resolution 1991/67, E/CN.4/1992/26, 16 June 1992.

[208] See, for example, Dinstein (footnote 81 above), pp. 69–71; Kolb and Vité (footnote 71 above), pp. 299–32; A. Roberts, "Transformative military occupation ..." (footnote 187 above), pp. 580–622; J. Cerone, "Human dignity in the line of fire: the application of international human rights law during armed conflict, occupation, and peace operations", *Vanderbilt Journal of Transnational Law*, vol. 39 (2006), pp. 1447–1610; Benvenisti, *The International Law of Occupation* (see footnote 86 above), pp. 12–16; Y. Arai-Takahashi, *The Law of Occupation: Continuity and Change of International Humanitarian Law and its Interaction with International Human Rights Law*, Leiden, Brill 2009; N. Lubell, "Human rights obligations in military occupation", *International Review of the Red Cross*, vol. 94, No. 885 (2012), pp. 317–337; Ferraro, "The law of occupation and human rights law..." (footnote 185 above), pp. 273–293; and M. Bothe, "The administration of occupied territory" (footnote 129 above). See, differently, M. J. Dennis, "Application of human rights treaties extraterritorially in times of armed conflict and military occupation", *American Journal of International Law*, vol. 99 (2005), pp. 119–141.

[209] See CCPR General Comment 26 (footnote 207 above), para. 4. See also *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996*, p. 226, para. 25, in which the Court states that such protection does not cease in times of war, except by operation of the provision concerning derogations.

and Political Rights as well as the International Covenant on Economic, Social and Cultural Rights and the Convention on the Rights of the Child were applicable to its actions in the occupied West Bank.[210] In *Armed Activities on the Territory of the Congo*, the Court referred to a number of human rights instruments to which both Uganda, as the occupying State, and the Democratic Republic of the Congo were parties.[211] Similarly, the European Court of Human Rights has determined that the European Convention on Human Rights was applicable to the actions of the United Kingdom as an occupying State in Iraq.[212]

54. Concurrent application of human rights law is of particular relevance for situations of occupation. The International Court of Justice has notably interpreted respect for the applicable rules of international human rights law to be part of the obligations of the occupying State under article 43 of The Hague Regulations.[213] The International Tribunal for the Former Yugoslavia has likewise stated that the distinction between a phase of hostilities and a situation of occupation "imposes more onerous duties on an occupying State than on a party to an international armed conflict".[214] Furthermore, the European Court of Human Rights has made it clear in several judgments that the European Convention of Human Rights applies in situations in which a State party exercises effective control of an area outside its national territory. According to the Court, "[t]he obligation to secure, in such area, the rights and freedoms set out in the Convention, derives from the fact of such control".[215] Human rights law does thus not only apply to situations of occupation but seems moreover to play a more important role during the occupation than in the phase of hostilities.

55. While it is generally agreed that human rights law applies in situations of armed conflict, it is equally non-contentious that its application must be qualified, taking into account the specific requirements of the law of armed conflicts. The International Tribunal for the Former Yugoslavia cautioned in this regard against embracing too easily concepts and notions that were developed in a different legal context. Although justifying recourse to instruments and practices developed in the field of human rights law in view of "their resemblance in terms of goals, values and terminology",[216] the Trial Chamber added that "notions developed in the field of human rights can be transposed in international humanitarian law only if they take into consideration the specificities of the latter body of law".[217]

56. There are furthermore both legal and factual limitations to the occupying State's margin of action in implementing human rights obligations. Legal limitations derive, *inter alia*, from the conservationist principle inherent in the obligation to respect the laws and institutions of the occupied territory. As a temporary territorial authority, the occupying State has only the status of administrator and is not supposed to try to replace the territorial sovereign. Factual limitations may be related to a volatile

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[210] *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* (see footnote 77 above), paras. 102–113.

[211] *Armed Activities on the Territory of the Congo* (see footnote 82 above), pp. 243–244, paras. 217 and 219.

[212] *Al-Skeini v. United Kingdom* (see footnote 206 above), paras. 149–150.

[213] *Armed Activities on the Territory of the Congo* (see footnote 82 above), p. 231, para. 178.

[214] *Prosecutor v. Naletilić and Martinović* (see footnote 76 above), para. 214.

[215] *Al-Skeini v. United Kingdom* (see footnote 206 above), para. 138; *Loizidou v. Turkey, Preliminary Objections, Judgment of 23 March 1995* (footnote 106 above), para. 62, and *Judgment (Merits) of 18 December 1996* (footnote 102 above), para. 52; *Cyprus v. Turkey* (see footnote 106 above), pp. 24–25, para. 76; *Ilaşcu and others v. Moldova and Russia, Application No. 48787/99, Judgment of 8 July 2004*, paras. 314–316.

[216] *Prosecutor v. Dragoljub Kunarac, Radomir Kovać and Zoran Vuković, Case Nos. IT-96-23-T and IT-96-23/1-T, Judgment of 22 February 2001*, para. 467.

[217] *Ibid.*, para. 471.

security situation. As an intermediate stage between invasion and the termination of the conflict, occupations may be characterized by instability, at least until the occupying State has been able to consolidate its control over the territory. There may furthermore be material limitations. As a general rule, the occupying State may use the resources of the occupied territory for the costs of the occupation, and for the benefit of the population. It is less clear whether and to what extent the resources of the occupying State should be used for the development of the occupied territory.[218]

57. The law of occupation provides the specialized legal regime designed for situations of occupation. In particular, it takes into account both the military and security interests of the occupying State, the interests of the territorial sovereign and those of the population under occupation. The recognition of the law of occupation as *lex specialis* therefore provides the point of departure for assessing how it interacts with other bodies of law. Three conclusions can be drawn from the above-cited statement of the International Court of Justice in its advisory opinion on the *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*.[219] First, the status of international humanitarian law as *lex specialis* does not mean that it systematically overrides international human rights law in all matters. Second, the notion of *lex specialis* does not apply to the general relationship between international humanitarian law and human rights law. The complementarity of human rights law can only be determined in relation to particular norms.[220] Similarly, "there can only be a conflict between two rules whose scopes of application (*ratione materiae, ratione loci, ratione temporis, ratione personae*) overlap in a given situation but which provide for diverging directives or standards".[221] Third, concurrent application of international humanitarian law and human rights law would not necessarily involve establishing priority between the relevant rules.

58. As the Commission's Study Group on the fragmentation of international law has pointed out, the power of a *lex specialis* norm "is entirely dependent on the normative considerations for which it provides articulation: sensitivity to context, capacity to reflect State will, concreteness, clarity, definiteness".[222] In many questions related to situations of occupation, a rule of the law of occupation has all these qualities in comparison with a corresponding rule of human rights law. The law of occupation is better adapted to the specific context of occupation: provisional nature, coercion, occasional instability. In more established situations and, in particular, in protracted occupations, the limitations of the law of occupation nevertheless become obvious. The law of occupation was historically designed to provide a necessary regulatory framework for the temporary exercise of foreign authority in territories the status of which was expected to be soon determined in a peace treaty. It is in this sense "*un droit de l'urgence*".[223] The Hague Regulations and the Geneva Convention relative to

[218] See Benvenisti, "Water conflicts during the occupation of Iraq" (footnote 128 above), p. 868; Lubell (footnote 208 above), pp. 332–334; and H. Cuyckens, *Revisiting the Law of Occupation*, Leiden, Brill/Nijhoff, 2017, pp. 197–198.

[219] *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* (see footnote 77 above), para. 106.

[220] Dinstein (see footnote 81 above), p. 88; M. Milanovic, *Extraterritorial Application of Human Rights Treaties*, Oxford University Press, 2011, pp. 232–234; A. Lindroos, "Addressing norm conflicts in a fragmented legal system: the doctrines of *lex specialis*", *Nordic Journal of International Law*, vol. 74 (2005), pp. 27–66, at p. 44.

[221] J. d'Aspremont and E. Tranchez, "The quest for a non-conflictual co-existence of international human rights law and humanitarian law: which role for the *lex specialis* principle?", in R. Kolb and G. Gaggioli (eds.), *Research Handbook on Human Rights and Humanitarian Law*, Cheltenham, Edward Elgar, 2013, pp. 223–250, at p. 225.

[222] Fragmentation of international law: difficulties arising from the diversification and expansion of international law, Analytical study prepared by the Study Group (A/CN.4/L.682, Corr.1 and Add.1), para. 119.

[223] Kolb and Vité (see footnote 71 above), p. 114.

the Protection of Civilian Persons in Time of War (Convention IV) give the occupying State less guidance regarding the obligation to restore and maintain public order and civil life in circumstances that approximate peacetime.[224]

59. In cases where both the law of occupation and international human rights law regulate the same subject matter and share the same objective, it may be possible to draw on one branch of law to enrich and deepen the rules of the other. Sometimes human rights law may provide clearer and more detailed regulation, which is still adaptable to the realities at hand.[225] Human rights law may, for instance, provide specifications for the interpretation of the notion of "civil life", or a more exact formulation of the obligations of States with regard to ensuring "public health". This may also include environmental questions if such questions have an impact on the welfare of the population. A further possibility is that both sets of rules address the same subject matter but provide different elements which complement each other. To illustrate: the protection provided by Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Protocol I) to objects that are indispensable for the survival of the civilian population may be complemented and strengthened by the provision of the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights that a people may "[i]n no case ... be deprived of its own means of subsistence".[226] If the former term — "objects indispensable" — has to be understood in an emergency context, the latter — "means of subsistence" — may include long-term dependence on a certain natural resource, the protection of which against excessive exploitation is thus strengthened.[227] In all times, however, the general framework for the occupying State's action — such as the provisional nature of its authority and the duty to respect the existing legislation and institutions — would continue to be provided by the law of occupation.

60. This is not to say that international human rights law and the law of occupation would always point to the same direction. For instance, the occupying Power may resort to temporary internment of civilians if necessary for maintaining public order and safety,[228] while no similar restriction to the freedom of movement is provided in human rights law. How long such measures continue to be justified depends on the evolution of the security situation.[229] A further example of the law of occupation and human rights law pertaining to the same subject matter and producing different outcomes can be presented regarding property and land rights during a prolonged occupation.[230] While private property rights enjoy particularly strong protection under the law of occupation, human rights law may allow limitations to these rights based on balancing and proportionality.[231]

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[224] *Ibid.*, p. 411: "*conçu pour être une réglementation de transition sur le court terme, le droit d'occupation n'envisage pas la question des conditions minimales d'existence au-delà du devoir d'assistance aux personnes en difficulté*".

[225] ICRC, *Expert Meeting* ... (see footnote 100 above), p. 8, suggesting that international human rights law can be used to complement the law of occupation in matters in which the latter is silent, vague or unclear.

[226] International Covenant on Civil and Political Rights, art. 1, para. 2; International Covenant on Economic, Social and Cultural Rights, art. 1, para. 2.

[227] See Dam-de Jong (footnote 128 above), p. 238.

[228] Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV), art. 78.

[229] *Ibid.*, art. 46.

[230] Gross, *The Writing on the Wall* ... (see footnote 91 above), p. 339–396, referring to the case law of the European Court of Human Rights on Northern Cyprus and that of the Supreme Court of Israel.

[231] *Ibid.*, at 389.

61. Economic, social and cultural rights seem to be particularly relevant in situations of occupation. First, in international and regional jurisprudence, such rights have been tied to territorial control.[232] Second, reference can be made to the commonality between economic, social and cultural rights, on the one hand, and the law of occupation, on the other, in terms of objectives, such as the well-being of the population. There is also considerable substantive overlap between provisions of the International Covenant on Economic, Social and Cultural Rights and the law of occupation. Third, the International Covenant on Economic, Social and Cultural Rights provides for the progressive realization of the relevant rights and acknowledges resource constraints. Similarly, the obligation of the occupying Power under article 43 of The Hague Regulations to restore and maintain public order and civil life, including public welfare, is an obligation of conduct that does not require the occupying State to obtain a specified result.[233] States parties have nevertheless certain immediate obligations in relation to the rights provided in the International Covenant on Economic, Social and Cultural Rights, such as the guarantee that the rights will be exercised without any kind of discrimination[234] and the obligation to take steps towards the full realization of the relevant right.[235] Such steps must be concrete and meaningful.[236]

62. Furthermore, the distinction between the obligation "to respect", as a negative obligation, and "to protect" and "to ensure" as positive obligations in human rights law,[237] have an equivalent in the law of occupation. Negative obligations — mostly prohibitions — under the law of occupation apply immediately, whereas the implementation of positive obligations depends on "the level of control exerted, the constraints prevailing in the initial phases of the occupation, and the resources available to the foreign forces".[238] The responsibilities falling on the occupying State are thus "commensurate with the duration of the occupation".[239] Similarly, it has been pointed out that positive human rights obligations, in difference from negative obligations, may only apply extraterritorially "in circumstances in which it would be reasonable for the State to take affirmative steps in light of its level of authority, control and resources".[240]

B. Environment and human rights: the right to health

63. The interrelationship between human rights and the protection of the environment has been widely recognized.[241] While references to the environment are rare in the major human rights treaties, which were mostly crafted before the time of widely shared concern for the environment, the relevant conventions have been applied in an environment-friendly way. Moreover, human rights tribunals have become the preferred avenue for seeking redress for environmental harm, given that

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[232] *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* (see footnote 77 above), para. 112; for the relevant case law of the European Court of Human Rights, see footnote 215 above.

[233] ICRC, Commentary of 2016 to article 2 ... (see footnote 75 above), para. 322.

[234] International Covenant on Economic, Social and Cultural Rights, art. 2, para. 2.

[235] *Ibid.*, art. 2, para. 1.

[236] CESCR General Comment No. 14, para. 30.

[237] See, for example, O. De Schutter, *International Human Rights Law: Cases, Materials, Commentary*, Cambridge University Press, 2014, pp. 280–295.

[238] ICRC, Commentary of 2016 to article 2 ... (see footnote 75 above), para. 322.

[239] *Ibid.*

[240] Cerone (see footnote 208 above), p. 1505, analysing the jurisprudence of the European Court of Human Rights.

[241] See the final Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox, of 24 January 2018 (A/HRC/37/59).

multilateral environmental agreements lack complaint procedures.[242] The links between the protection of the environment and human rights have also been developed in the jurisprudence and practice of human rights treaty bodies. Within its concluding observations, the Committee on Economic, Social and Cultural Rights has interpreted the right to food in the context of pollution resulting from farming, and industrial and extractive activities.[243] Moreover, the right to food has been related to the depletion of natural resources traditionally possessed by indigenous communities.[244]

64. Environmental degradation may be linked to the violation of several human rights, such as the right to life, right to private and family life, right to health, or right to food. There is a considerable amount of relevant case law from the past two decades from both the national and regional levels. As for the right to life, mention can be made, for instance, of the decision of the Court of Justice of the Economic Community of West African States in *SERAP v. Nigeria* case, in which the Court affirmed that "[t]he quality of human life depends on the quality of the environment".[245] In *Yanomami v. Brazil*, the Inter-American Court of Human Rights acknowledged that a healthy environment and the right to life are interlinked.[246] The European Court of Human Rights recognized in the *Öneryildiz v. Turkey* case that the right to life was impaired by a methane explosion at the municipal waste dump.[247] In the jurisprudence of the European Court of Human Rights, the right to privacy is one of the most commonly used grounds for cases that relate to environmental matters.[248] A recent advisory opinion of the Inter-American Court of Human Rights, in response to a request to consider the rights to life and personal integrity in light of international environmental law, concluded that the right to a healthy environment is a fundamental human right.[249] Often, however, economic, social and cultural rights have been seen to provide a basis for considering "whether substantive environmental standards and

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[242] D. Shelton, "Human rights and the environment: substantive rights", in M. Fitzmaurice, D. M. Ong and P. Merkouris (eds.), *Research Handbook on International Environmental Law*, Cheltenham, Edward Elgar, 2011. See, however, a recent initiative seeking to establish greater environmental participatory rights: the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, available from www.cepal.org/en/publications/39051-text-compiled-presiding-officers-incorporating-language-proposals-countries.

[243] Concluding Observations of the Committee on Economic, Social and Cultural Rights: Russian Federation, 20 May 1997, U.N. Doc. E/C.12/1/Add.13, para. 24, in which the Committee expressed its serious concern as to the rate of contamination of foodstuffs appearing to be caused "by the improper use of pesticides and environmental pollution such as through the improper disposal of heavy metals and oil spills".

[244] Report of the ESCR Committee for the 20th and 21st sessions, Consideration of reports of States parties: Cameroon (1999), E/C.12/1999/11, para. 337; Report of the ESCR Committee for the 42nd and 43rd sessions, Consideration of reports of States parties: Madagascar (2009), E/C.12/2009/3, para. 372; Report of the ESCR Committee for the 46th and 47th sessions, Consideration of reports of States parties: Argentina (2011), E/C.12/2011/3, para. 268; Report of the ESCR Committee for the 38th and 39th sessions, Consideration of reports of States parties: Paraguay (2007), E/C.12/2007/3, para. 436.

[245] *Socio-Economic Rights and Accountability Project (SERAP) v. Nigeria*, document No. ECW/CCJ/JUD/18/12.

[246] *Yanomami v. Brazil*, 5 March 1985, IACHR Resolution No. 12/85, Case No. 7615, Resolution 1.

[247] *Öneryildiz v. Turkey, Application No. 48939/99, Judgment of 30 November 2004*, para. 71.

[248] Article 8 of the European Convention on Human Rights. The case law relating to the interpretation of this right in the context of environmental matters is ample, see, for example, *Powell and Rayner v. the United Kingdom, Application No. 9310/81, Judgment of 21 February 1990; López Ostra v. Spain, Application No. 16798/90, Judgment of 9 December 1994; Guerra and Others v. Italy, Application No. 116/1996/735/532, Judgment of 19 February 1998; and Fadeyeva v. Russia, Application No. 55723/00, Judgment of 9 June 2005*.

[249] *The Environment and Human Rights, Advisory Opinion OC-23/17 of 15 November 2017*, Inter-American Court of Human Rights, Series A, No. 23, paras. 55 and 59. The opinion was published on 7 February 2018 and is available from www.corteidh.or.cr/docs/opiniones/seriea_23_esp.pdf.

conditions are being maintained at satisfactory levels".[250] The next few paragraphs focus on the right to health as one of the closest links between human rights and the protection of the environment.

65. The provisions of the law of occupation concerning healthcare are fairly rudimentary. According to article 56 of the Geneva Convention relative to the Protection of Civilian Persons in Time of War (Convention IV), the occupying State has the duty, "[t]o the fullest extent of the means available to it, ... of ensuring and maintaining, with the cooperation of national and local authorities, the medical and hospital establishments and services, public health and hygiene in the occupied territory, with particular reference to ... measures to combat the spread of contagious diseases and epidemics". This provision, also in light of the ICRC Commentary of 2016, has a clear focus on the immediate aftermath of hostilities and urgent risks to health arising from malnutrition, displacement and inadequate sanitary conditions. At the same time, the general obligation of the occupying State to restore and maintain public order and civil life, together with the reference in article 56 to ensuring and maintaining medical services, public health and hygiene in the occupied territory, implies that the occupying State, once such risks have been alleviated, should also begin to pay attention to more long-term public health issues.[251] The established practice of interpreting and implementing the right to health can shed more light on what the general references to the occupying State's obligations in respect of public health may entail. This consideration highlights the complementary role of human rights law in situations of occupation from a point of view that is also relevant for the protection of the environment.

66. The right to health has been incorporated in several international human rights documents, including the Universal Declaration of Human Rights [252] and the International Covenant on Economic, Social and Cultural Rights.[253] The Committee on Economic, Social and Cultural Rights has further explained that "the right to health embraces a wide range of socio-economic factors that promote conditions in which people can lead a healthy life, and extends to the underlying determinants of health, such as food and nutrition, housing, access to safe and potable water and adequate sanitation, safe and healthy working conditions, and a healthy environment."[254] In commenting on "the right to healthy natural and workplace environments",[255] the Committee has furthermore stated that it comprises, *inter alia*, "the prevention and reduction of the population's exposure to harmful substances such as radiation and harmful chemicals or other detrimental environmental conditions that directly or indirectly impact upon human health".[256] The link to the environment is obvious also from the reference in the same context to the Stockholm Declaration of 1972.[257] Within its other practice, the Committee has recognized the interrelationship between the enjoyment of the right to health, on the one hand, and environmental degradation,[258] environmental pollution,[259] as well as depletion of natural resources

[250] Sands and Peel (see footnote 197 above), p. 817.

[251] See Lubell (footnote 208 above), pp. 317–337.

[252] Universal Declaration on Human Rights, A/RES/217 A, art. 25, para. (1).

[253] International Covenant on Economic, Social and Cultural Rights, art. 12.

[254] CESCR General Comment No. 14, para. 4.

[255] International Covenant on Economic, Social and Cultural Rights, art. 12.2(b).

[256] *Ibid.*, para. 15.

[257] Declaration on the Human Environment, in Report of the United Nations Conference on the Human Environment, 16 June 1972, A/CONF.48/14, at 2 and Corr.1 (Stockholm Declaration), principle 1: "Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being".

[258] See, for example, Concluding Observations of the ESCR Committee: Uzbekistan, 24 January 2006, E/C.12/UZB/CO/1, para. 28.

[259] CESCR General Comment No. 14, para. 15.

located in the areas traditionally inhabited by indigenous persons, on the other hand.[260]

67. The Convention on the Rights of the Child, in turn, specifically connects the right to health to the environment.[261] In the related General Comment, the Committee on the Rights of the Child notes that "States should take measures to address the dangers and risks that local environmental pollution poses to children's health in all settings".[262] The issue of environmental pollution and its relationship with the right to health is frequently, although with a variable specificity, addressed in the Committee's Concluding Comments.[263] The impact of armed conflict on the right to health of children has also been highlighted, for instance with reference to toxic remnants of war, which "inflict pain and suffering on communities long after the conflicts have concluded".[264] In Iraq, "independent studies suggest that birth defects have increased dramatically among children in conflict areas, who in many cases do not have access to medical care and treatment".[265]

68. Additionally, certain regional human rights treaties incorporate the notion of the right to health, or even the right to a healthy environment. For instance, the African Charter on Human and Peoples' Rights incorporates both the right to health and the explicit right to a healthy environment.[266] These rights were resorted to in *Social and Economic Rights Action Centre and another v. Federal Republic of Nigeria* (*Ogoniland* case)[267] and *SERAP v. Nigeria* case. In the former case, concerning degradation of the environment and related health problems caused by the operations of an oil consortium, the African Commission found that the above-mentioned provisions "recognise the importance of a clean and safe environment that is closely linked to economic and social rights in so far as the environment affects the quality of life and safety of the individual".[268] In the latter case, concerning oil prospecting and the related degradation of the environment in the Niger Delta, the ECOWAS Court of Justice found a violation of the right to a healthy environment and affirmed that "it is public knowledge that oil spills pollute water, destroy aquatic life and soil fertility with resultant adverse effect on the health and means of livelihood of people in its vicinity".[269] Similarly, the Additional Protocol to the American Convention on Human Rights in the area of Economic, Social and Cultural Rights (Protocol of San Salvador) includes the right to health.[270] The regional jurisprudence acknowledges

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[260] See, for example, Report of the ESCR Committee for the 32nd and 33rd sessions, Consideration of reports of States parties: Ecuador (2004), E/C.12/2004/9, para. 278; Report of the ESCR Committee for the 25th, 26th and 27th sessions, Consideration of reports of States parties: Venezuela (2001), E/C.12/2001/17, para. 85.

[261] Art. 24.

[262] CRC General Comment No. 15, "The right of the child to the enjoyment of the highest attainable standard of health", 17 April 2013, CRC/C/GC/15, paras. 49–50.

[263] See, for example, the Report of the Committee on the Rights of the Child, 33rd Session, 23 October 2003, CRC/C/132, para. 434; Concluding Observations of the Committee on the Rights of the Child: Bangladesh, 27 October 2003, CRC/C/15/Add.221, para. 53.

[264] Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, 2 August 2016, A/HRC/33/41, para. 16.

[265] *Ibid.*

[266] Art. 16(1) (the right to health), art. 24 (the right to a general satisfactory environment favourable to [each person's] development".

[267] *Social and Economic Rights Action Centre (SERAC) and another v. Federal Republic of Nigeria*, Communication 155/96 (African Commission on Human and Peoples' Rights 2001).

[268] *Ibid.*, para. 50.

[269] *SERAP* case, para. 96.

[270] Additional Protocol to the American Convention on Human Rights in the area of Economic, Social and Cultural Rights (San Salvador, 17 November 1988), Organization of American States, *Treaty Series* No. 69.

that the right to health includes an element of environmental protection, such as a pollution-free environment.[271] Furthermore, several multilateral environmental agreements recognize that human life and health can be impacted by environmental hazards.[272]

69. Multiple non-binding documents interlink the human right to health with the protection of the environment. In Asia, for instance, the ASEAN Human Rights Declaration incorporates the right to a healthy environment as an element of the right to an adequate standard of living.[273] The 2004 Arab Charter on Human Rights, moreover, acknowledges that the right to a healthy environment is an element of the right to an adequate standard of living.[274] The American Declaration of the Rights and Duties of Man acknowledges that every person has the right to preserve "his health through sanitary and social measures relating to food, clothing, housing and medical care".[275] Furthermore, the right to health and its relationship to environmental protection has been recognized in the Stockholm Declaration[276] and the 1989 European Charter on Environment and Health (European Environment and Health Charter).[277] Additionally, the links between the right to health and the environment have been addressed in the work of special rapporteurs of the Human Rights Council,[278] and States have discussed both the right to a healthy environment and the

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[271] See IACHR Annual Report 1984–85, Chapter V, Areas in which Further Steps are Needed to Give Effect to the Human Rights Set Forth in the American Declaration of the Rights and Duties of Man and the American Convention on Human Rights, OEA/Ser.L/V/II.66; see also IACHR Report on The Situation of Human Rights in Cuba, 4 October 1983, OEA/Ser.L/V/II.61, Doc. 29 rev. 1, Chap. XIII (*The Right to Health*), para. 41; Case No. 7615; *Indigenous Community Yakye Axa v. Paraguay*, Merits, Reparations, and Costs Judgment of 17 June 2005 (Series C No. 125), para. 167.

[272] See, for example, the United Nations Convention on the Law of the Sea, art. 1; the Vienna Convention for the Protection of the Ozone Layer, preamble; the United Nations Framework Convention on Climate Change, art. 1; the Convention on Biological Diversity, preamble; the Cartagena Protocol on Biosafety to the Convention on Biological Diversity, preamble, art. 1; the Stockholm Convention on Persistent Organic Pollutants, preamble and arts. 1, 3, 6, 9–11 and 13; and the Minamata Convention on Mercury, preamble and arts. 1, 3–5, 12, 16–19.

[273] ASEAN Human Rights Declaration, 18 November 2012, (para. 28 (f)), available from www.asean.org/storage/images/ASEAN_RTK_2014/6_AHRD_Booklet.pdf. See also the Ministerial Declaration on Environment and Development in Asia and the Pacific, 14 September 2017, E/ESCAP/MCED(7)/5, paras. 13 and 19, available from www.apministerialenv.org/document/MCED_5E.pdf; and the Yangon Resolution on Sustainable Development, 18 December 2007, available from http://asean.org/yangon-resolution-on-sustainable-development-2/.

[274] League of Arab States, Arab Charter on Human Rights (22 May 2004), arts. 38 and 39(2), reprinted in *International Human Rights Report*, vol. 12 (2005), p. 893.

[275] American Declaration of the Rights and Duties of Man, O.A.S. Res. XXX (2 May 1948), reprinted in *Basic Documents Pertaining to Human Rights in the Inter-American System*, OAS/Ser.L/V/I.4 Rev.9 (2003), article XI. See also *Interpretation of the American Declaration of the Rights and Duties of Man Within the Framework of Article 64 of the American Convention on Human Rights, Advisory Opinion OC-10/89, 14 July 1989*, Inter-American Court of Human Rights, (Ser. A), No. 10 (1989).

[276] Stockholm Declaration (see footnote 257 above), preamble and Principle 7.

[277] European Charter on Environment and Health, adopted at First European Conference on Environment and Health, Frankfurt, 7–8 December 1989, preamble.

[278] See, for example, the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, report of the Special Rapporteur, Paul Hunt, E/CN.4/2003/58, para. 23; *Human Rights Situation in Palestine and other Occupied Arab Territories*, Combined report under resolution S-9/1, of the Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, the Special Representative of the Secretary-General for Children and Armed Conflict, the Special Rapporteur on violence against women, its causes and consequences, the Representative of the Secretary-General on the human rights of internally displaced persons, the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context, the Special Rapporteur on the right to food, the Special

connection between the right to health and environmental protection in the context of the universal periodic reviews.[279]

70. The above overview suggests that the close connection between the right to health and the environment has been acknowledged worldwide. Insofar as environmental degradation such as pollution or resource depletion threatens public health, the related human rights obligations of States are not limited to timely and appropriate health care but extend to measures that also protect the environment. In this respect, it has been pointed out that "lack of access to drinking water which is free from toxic or other contaminants, pollution of the atmosphere by heavy metals or radioactive materials, or the dumping of hazardous or toxic wastes in the vicinity of people's homes" can all be viewed as violations of fundamental economic and social rights.[280] The developing case law of regional human rights courts provides some indications of the thresholds which must be met in terms of environmental degradation for a breach of a person's substantive human rights to be found.[281] The need for the establishment of "substantive environmental standards, *inter alia* with respect to air quality, the global climate, freshwater quality, marine pollution, waste, toxic substances, protected areas, conservation and biological diversity" has nevertheless been recognized.[282]

71. A further question relates to how such thresholds or standards may need to be adapted in situations of armed conflict and occupation. It should be recalled in this respect that the right to health, like all human rights, imposes three levels of obligations on States parties to human rights treaties.[283] According to the Committee on Economic, Social and Cultural Rights, the obligation "to respect" requires States to refrain from interfering, directly or indirectly, with the enjoyment of the right to health. The obligation "to protect" requires that States take measures to prevent third parties from doing so. Finally, the obligation "to fulfil" requires that States adopt appropriate measures towards the full realization of the right to health.[284] As far as the obligation to respect the right to health is concerned, the Committee explains that States should, *inter alia*, "refrain from unlawfully polluting air, water and soil, for instance through industrial waste from State-owned facilities".[285] In addition, States should "refrain from withholding or intentionally misrepresenting health-related information" as well as from "preventing people's participation in health-related

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Rapporteur on extrajudicial, arbitrary or summary executions, the Special Rapporteur on the right to education, and the Independent Expert on the question of human rights and extreme poverty, 29 May 2009, A/HRC/10/22, para. 54.

[279] Mapping Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, Individual Report of the General Assembly and the Human Rights Council, including the Universal Periodic Review Process, Report No. 6, December 2013, part 3.C. See also Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox, 30 December 2013, A/HRC/25/53.

[280] Sands and Peel (see footnote 197 above), p. 818.

[281] See, for example, the *Yanomami v. Brazil*, *Öneryildiz v. Turkey*, Lopez Ostra v. Spain, *Guerra and others v. Italy*, *Fadeyeva v. Russia*, *SERAC* and *SERAP* cases as well as *The Environment and Human Rights*, Advisory Opinion of the Inter-American Court of Human Rights, discussed above. See also R. Pavoni, "Environmental jurisprudence of the European and Inter-American Courts of Human Rights: Comparative insights", in B. Boer, *Environmental Law Dimensions of Human Rights*, Oxford University Press, 2015, pp. 69–106.

[282] See the final Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox, of 24 January 2018 (A/HRC/37/59), Framework Principle 11, commentary, para. 31.

[283] See footnote 235 above.

[284] CESCR General Comment No. 14, para. 33.

[285] *Ibid.*, para. 34.

matters".[286] The obligation "to fulfil" requires States parties, *inter alia*, to give sufficient recognition to the right to health in the national political and legal systems. This includes also the requirement to adopt measures against such risks as environmental health hazards. For this purpose States "should formulate and implement national policies aimed at reducing and eliminating pollution of air, water and soil, including pollution by heavy metals such as lead from gasoline".[287]

72. As was pointed out above, the Covenant provides for progressive realization and acknowledges the constraints due to the available resources. In the case of an occupying State, the notion of available resources may refer to proceeds from the occupied territory which the occupant can use for the expenses of the occupation and for the benefit of the occupied population. Whether and to what extent the occupying State should use its own resources depends on several considerations.[288] Other limitations to the occupying State's positive (including legislative) action derive from the conservationist principle. While this principle may be seen as "elastic enough" to allow for legislation that is consonant with new developments, provided that it is necessary for security reasons, for ensuring observance of international humanitarian law, or for meeting the needs of the population,[289] much depends on the nature and duration of the occupation. Furthermore, as the objectives of such forward-looking action are limited, it could be appropriate in a prolonged occupation to engage the population in the decision-making process.

73. It can be concluded, in view of the material and legal limitations related to the temporary nature of situations of occupation, that the formulation and implementation of national environmental policies would not be feasible, and not even a desirable objective for an occupying State, at least not without the participation of the occupied population. At the same time, the progressive realization of the right to health over a period of time should not be interpreted as depriving States parties' obligations of all meaningful content.[290] Moreover, the duties incumbent on an occupying State are supposed to grow so as to be "commensurate with the duration of the occupation".[291]

74. As far as the initial phases of an occupation are concerned, the obligations of the occupying State would mainly seem to fall within the scope of "respect" such as refraining from acts that cause significant harm to the environment and the public health.[292] Furthermore, the public health priorities of the occupying State could include protection of the population from the adverse health effects of pollution through toxic substances, water or oil pollution, or other health risks related to environmental damage resulting from the armed conflict.[293]

75. The United Nations Environment Programme has reported how the Coalition Provisional Authority (CPA) in Iraq, as a representative of the occupying States, tried to respond to some of the immediate environmental problems with obvious health implications. According to UNEP, the failure of the waste management system during the conflict "had led to the uncontrolled and occasional dumping of municipal waste in the streets, due to the failure of collection systems, looting or restrictions". In

[286] *Ibid.*

[287] *Ibid.*, para. 36.

[288] See footnote 218 above.

[289] Dinstein (see footnote 81 above), pp. 112–116.

[290] See footnote 235 above.

[291] ICRC, *Expert Meeting* ... (footnote 100 above).

[292] The United Nations report on the situation of human rights in Kuwait under Iraqi occupation suggested that "in times of armed conflict, the deliberate causing of large-scale environmental damage which severely affects the health of a considerable proportion of the population concerned, or creates risks for the health of future generations", amounts to a serious violation of the right to health (see footnote 207 above, p. 53).

[293] See, for example, Hulme (footnote 65 above), pp. 119–142.

addition, the conflict had "generated large volumes of demolition waste from bomb-damaged buildings (potentially impacted by depleted uranium and asbestos) and military hardware (vehicles, unexploded ordnance, depleted uranium)".[294] UNEP has reported that the CPA initiated emergency waste collection, which resulted in "the removal of in excess of 1 million m^3 of waste from the streets and neighbourhoods in Baghdad".[295] Additionally, "the CPA began a structural assessment and demolition/removal of bomb-damaged buildings in Baghdad".[296] Moreover, the CPA announced that it was funding a waste management programme directly through the Iraqi Ministry of Works, which would temporarily employ 100,000 people to collect and remove waste from the streets and sewage network.[297]

76. In more established situations of occupation, the relevant negative obligations could include, at least, refraining from unlawfully polluting air, water and soil and from withholding environmental information that is related to public health, as suggested by the Committee on Economic, Social and Cultural Rights.[298] This should not, however, be interpreted to mean that the occupying State would have to assume responsibility for policy decisions taken by the territorial sovereign before the occupation. For instance, if the economy of the occupied territory relies on polluting industries, to introduce a complete overhaul of the production infrastructure would exceed the occupying State's competence as a temporary administrator. In a prolonged occupation, however, active measures could be justified so as to prevent stagnation.[299]

III. Role of international environmental law in situations of occupation

A. Complementarity of international environmental law

77. The applicability of international environmental law in situations of armed conflict is a subject to which, in general, both scholars and international courts and tribunals have devoted considerably less attention than the interplay of human rights law and international humanitarian law. The International Court of Justice's 1996 advisory opinion on the *Legality of Nuclear Weapons* provides in this regard important support to the claim that customary international environmental law continues to apply in situations of armed conflict. According to the Court, While the existing international law relating to the protection and safeguarding of the environment does not specifically prohibit the use of nuclear weapons, it indicates important environmental factors that are properly to be taken into account in the context of the implementation of the principles and rules of the law applicable in armed conflict.[300]

78. The Commission's 2011 draft articles on the effects of armed conflicts on treaties indicate that treaties relating to the international protection of the environment, treaties relating to international watercourses or aquifers, and multilateral law-making treaties may continue in operation during armed conflict.[301]

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[294] UNEP, *Environment in Iraq: UNEP Progress Report* (see footnote 58 above), p. 16.
[295] *Ibid.*
[296] *Ibid.*
[297] *Ibid.*, p. 17.
[298] See footnote 236 above.
[299] See paragraphs 43–46 above.
[300] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996*, p. 226, para. 33.
[301] Draft articles on the effects of armed conflicts on treaties, *Yearbook ... 2011*, vol. II (Part Two), pp. 107–130, paras. 100–101.

While the inclusion of such treaties in the indicative list only created "a set of rebuttable presumptions"[302] based on the subject matter of the treaties in question, the Commission noted that the Court's observations on the *Legality of the Threat or Use of Nuclear Weapons* "provide[d] general and indirect support for the use of the presumption that environmental treaties apply in case of armed conflict".[303] As far as treaties on watercourses and aquifers are concerned, reference can also be made to the Commission's draft articles on topics "The law of the non-navigational uses of international watercourses" and "The law of transboundary aquifers".[304] As to law-making treaties, the relevant commentary referred to the non-political nature of such treaties, their intended permanent nature, and to state practice.[305] These grounds appear to be relevant also to multilateral environmental agreements. Furthermore, to the extent that such treaties address environmental problems that have a transboundary nature, or a global scope, and the treaties have been widely ratified, it may be difficult to conceive suspension only between the parties to a conflict.[306] Obligations established under such treaties can be said to protect a collective interest and be owed to a wider group of States than the ones involved in the conflict or occupation.[307]

79. The ICRC Guidelines on the protection of the environment in times of armed conflict furthermore state that "[i]nternational environmental agreements and relevant rules of customary law may continue to be applicable in times of armed conflict to the extent that they are not inconsistent with the applicable law of armed conflict. Obligations concerning the protection of the environment that are binding on States not party to an armed conflict (e.g. neighbouring States) and that relate to areas beyond the limits of national jurisdiction (e.g. the high seas) are not affected by the existence of the armed conflict to the extent that those obligations are not inconsistent with the applicable law of armed conflict".[308]

80. On this basis, it is possible to conclude that international environmental law, both customary and conventional, continues to play a certain role in situations of occupation. This is even more notably so given that the work of the Commission on

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[302] *Ibid.*, p. 120, paragraph (2) of the commentary to the annex.

[303] *Ibid.*, p. 127, paragraph (55) of the commentary to the annex.

[304] Draft articles on the law of the non-navigational uses of international watercourses with commentaries and resolution on Transboundary confined groundwater, commentary to article 29, paragraph 3, *Yearbook ... 1994*, vol. II (Part Two), pp. 88–135, paras. 210–222: "Of course, the present articles themselves remain in effect even in time of armed conflict. The obligation of watercourse States to protect and use international watercourses and related works in accordance with the articles remains in effect during such times. Warfare may, however, affect an international watercourse as well as the protection and use thereof by watercourse States. In such cases, article 29 makes clear that the rules and principles governing armed conflict apply." See also the draft articles on the law of transboundary aquifers with commentaries, *Yearbook 2008*, vol. II (Part Two), pp. 19–43, paras. 53–54, commentary to article 18, paragraph 3: "The obligation of the aquifer States to protect and utilize transboundary aquifers and related works in accordance with the present draft articles should remain in effect even during the time of armed conflict. Warfare may, however, affect transboundary aquifers as well as the protection and utilization thereof by aquifer States. In such cases, draft article 18 makes it clear that the rules and principles governing armed conflict apply."

[305] Draft articles on the effects of armed conflicts on treaties, Annex, paras. 15–21.

[306] K. Bannelier-Christakis, "International Law Commission and protection of the environment in times of armed conflict: a possibility for adjudication?", *Journal of International Cooperation Studies*, vol. 20, No. 2 (2013), pp. 129–145, at p. 140–141; and Dam-de Jong (see footnote 128 above), pp. 110–111.

[307] In the sense of article 48, paragraph 1 (a), of the articles on State responsibility, the relevant commentary, paragraph 7, mentions environmental treaties in this context. See *Yearbook ... 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, pp. 26–143, p. 126.

[308] ICRC, Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict (1996), para. 5.

the topic "Effects of armed conflicts on treaties" considered armed conflicts in general, and that the International Court of Justice in *Legality of Nuclear Weapons* focused on the use of weapons that "have the potential to destroy all civilization and the entire ecosystem of the planet",[309] whereas situations of occupation may at times come close to peacetime circumstances. Similarly to the case of human rights law, there is reason to distinguish the stage of occupation from the stage of active hostilities also in terms of the applicability of peacetime law.

B. Due diligence

81. As far as customary international environmental law is concerned, the responsibility not to cause damage to the environment of other States or to areas beyond national jurisdiction, contained in Principle 21 of the Stockholm Declaration of 1972 and Principle 2 of the 1992 Rio Declaration on Environment and Development, is of central interest.[310] It has been called "the cornerstone of international environmental law"[311] and "the most accepted principle of international environmental law as yet".[312] This obligation corresponds to the concept of due diligence,[313] and has sometimes been referred to in the context of international environmental law as the "Trail Smelter" principle,[314] or the "no harm" principle. The obligation not to cause harm to the environment of other States is generally seen as customary law in the context of environmental protection. The International Court of Justice referred to this principle in the *Nuclear Weapons* case, stating that there is a general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States and of areas beyond national control. According to the Court, this obligation is "now part of the corpus of international law relating to the environment".[315] Furthermore, the Commission has included this principle in its draft articles on prevention of transboundary harm from hazardous activities.[316] According to the related commentary, the obligation of due diligence can be deduced from a number of international conventions as the standard basis for the protection of the environment from harm.[317]

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[309] *Nuclear Weapons* advisory opinion, para. 35.

[310] Stockholm Declaration (see footnote 257 above), principle 21: "States have, in accordance with the Charter of the United Nations and the principles of international law ... the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction." See also the Rio Declaration on Environment and Development (see footnote 66 above), principle 2.

[311] Sands and Peel (see footnote 197 above), p. 201.

[312] T. Koivurova, "What is the principle of due diligence?", in J. Petman and J. Klabbers (eds.), *Nordic Cosmopolitanism. Essays in International Law for Martti Koskenniemi*, London, Martinus Nijhoff, 2003, pp. 341–349, p. 349.

[313] The *Corfu Channel Case, Judgment on Preliminary Objections, I.C.J. Reports 1948*, p. 15; International Law Association, Study Group on Due Diligence in International Law, *First Report* (March 2014) and *Second Report* (July 2016); and T. Koivurova, "Due diligence", *Max Planck Encyclopedia of Public International Law*, available from www.mpepil.org.

[314] *Trail Smelter Case (United States, Canada), 16 April 1938 and 11 March 1941*, UNRIAA, vol. III, pp. 1905–1982.

[315] *Nuclear Weapons* advisory opinion, para. 29. See also Sands and Peel (footnote 197 above), p. 206, as well as U. Beyerlin, "Different types of norms in international environmental law: Policies, principles and rules", in D. Bodansky, J. Brunnée and E. Hey (eds.), *The Oxford Handbook of International Environmental Law*, Oxford University Press, 2008, pp. 426–448, p. 439.

[316] Draft articles on the prevention of transboundary harm from hazardous activities, article 3: "The State of origin shall take all appropriate measures to prevent significant transboundary harm or at any event to minimize the risk thereof", *Yearbook ... 2001*, vol. II (Part Two) and corrigendum, pp. 144–170, paras. 78–98.

[317] *Ibid.*, commentary to art. 3, para. 8.

82. As regards the applicability of this principle in the specific context of occupation, reference can be made to the International Court of Justice's advisory opinion on the *Legal Consequences for States of the Continued Presence of South Africa in Namibia*, in which the Court underlined the international obligations and responsibilities of South Africa towards other States while exercising its powers in relation to the occupied territory, stating that "[p]hysical control of a territory, and not sovereignty or legitimacy of title, is the basis of State liability for acts affecting other States".[318] Furthermore, the Court has referred to the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control in its judgment concerning the *Pulp Mills on the River Uruguay* case,[319] as well as in the joint cases of *Certain Activities* and the *Construction of a Road*.[320]

83. The Commission's draft articles on the prevention of transboundary harm from hazardous activities state that this obligation applies to activities carried out within the territory or otherwise under the jurisdiction or control of a State.[321] It should be recalled that the Commission has consistently used this formulation to refer not only to the territory of a State but also to activities carried out in other territories under the State's control. As explained in the commentary to draft article 1, "it covers situations in which a State is exercising *de facto* jurisdiction, even though it lacks jurisdiction *de jure*, such as in cases of unlawful intervention, occupation and unlawful annexation."[322] It seems therefore well grounded that the occupying State has to observe the no harm principle (due diligence) so as to prevent serious transboundary harm to the environment of third states.

84. The "no harm" or due diligence principle in customary international environmental law only applies to harm above a certain threshold, most often indicated as "significant harm",[323] and it is an obligation of conduct which requires that the State takes all measures it can reasonably be expected to take.[324] The Commission has described the main elements of the obligation of due diligence involved in the duty of prevention of transboundary harm from hazardous activities as follows: The main elements of the obligation of due diligence involved in the duty of prevention could be thus stated: the degree of care in question is that expected of a good Government. It should possess a legal system and sufficient resources to maintain an adequate administrative apparatus to control and monitor the activities. It is, however, understood that the degree of care expected of a State with a well-developed economy and human and material resources and with highly evolved systems and structures of governance is different from States which are not so well placed. Even in the latter case, vigilance, employment of infrastructure and monitoring of hazardous activities in the territory of the State, which is a natural attribute of any Government, are expected.[325]

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[318] *Legal Consequences for States of the Continued Presence of South Africa in Namibia* (see footnote 141 above), at p. 54, para. 118.

[319] *Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, I.C.J. Reports 2010*, p. 14, para. 101.

[320] *Certain Activities Carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)* and *Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica), Judgment, I.C.J. Reports 2015*, p. 665.

[321] Draft articles on the prevention of transboundary harm from hazardous activities, commentary to article 2 (use of terms), para. 10.

[322] *Ibid.*, commentary to draft art. 1, para. 12.

[323] See, for example, Koivurova, "Due diligence" (footnote 313 above), para. 23.

[324] International Law Association, *Second Report* (see footnote 313 above), p. 8.

[325] Draft articles on the prevention of transboundary harm from hazardous activities, commentary to article 3, para. 17.

85. While it is doubtful whether an occupying State, as a temporary administrator, could be required to fulfil the requirements of "a good Government", the minimum level of vigilance along the lines described in the commentary, and depending on the nature of the activity, could form the core of the occupant's obligations to prevent transboundary environmental harm.

86. The obligation not to cause significant harm to the environment of other States has an established status in a transboundary context and is particularly relevant with regard to shared natural resources such as sea areas, international watercourses and transboundary aquifers. This obligation is explicitly contained in the 1997 Convention on the Law of the Non-navigational Uses of International Watercourses[326] and in the UNECE Convention on Transboundary Watercourses and International Lakes[327] as well as in the United Nations Convention on the Law of the Sea.[328] Numerous regional treaties establish corresponding obligations of prevention, cooperation, notification or compensation with regard to damage caused to rivers or lakes.[329] The principle has also been confirmed and clarified in international and regional jurisprudence.[330]

87. As mentioned above, the authority of an occupying State established in a certain land territory extends to the adjacent maritime areas as well as the superjacent air space.[331] It follows from such authority, at least when the territory of a State as a whole is occupied, that the occupying State also, on a temporary basis, becomes subject to the rights and obligations regarding a watercourse, lake, maritime area or other transboundary water resource the territorial sovereign shares with other States.[332] This would include the obligation not to cause significant harm to the environment of other States or areas beyond national jurisdiction, as well as the related procedural obligations.

88. The question of the obligations of the occupying State with regard to third States may, moreover, be affected by the rules of neutrality. As long as active hostilities continue, and until the end of the armed conflict, including any situation of occupation, the rules of neutrality continue to apply.[333] The territory of neutral States is inviolable and protected also from collateral damage.[334] It is to be noted that this protection is absolute, while due diligence is an obligation of conduct which only requires the best efforts of a State, taking into account its capacity. At the same time,

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[326] Art. 7.

[327] Art. 2.

[328] Art. 194 (2).

[329] See, for example, the Convention on the Protection of the Rhine (1999), the Agreement on the Action Plan for the Environmentally Sound Management of the Common Zambezi River System (1987), and the Agreement on Co-operation for the Sustainable Development of the Mekong River Basin (1995), all available from www.ecolex.org. See also the Revised Great Lakes Water Quality Agreement (United States, Canada, 2013), available from https://ijc.org.

[330] Several of the cases in which the International Court of Justice has clarified environmental obligations have been related to the use and protection of water resources such as wetlands or river, for example, the *Construction of a Road* (see footnote 320 above) and *Pulp Mills* (see footnote 319 above) cases as well as the *Gabčíkovo-Nagymaros* case (see footnote 201 above). See also *Indus Waters Kishenganga Arbitration, Case No. 2011-1, 20 December 2013*, Permanent Court of Arbitration, paras. 449–450. Regional jurisprudence is widely available from www.ecolex.org.

[331] See paragraph 21 above.

[332] Benvenisti, "Water conflicts during the occupation of Iraq" (see footnote 128 above).

[333] M. Bothe, "The law of neutrality", in D. Fleck (ed.), *The Handbook of International Humanitarian Law*, 3rd ed., Oxford University Press, 2013, pp. 549–580, at pp. 559–560. On inconsistent practice as to the duration of neutrality, see P. Hostetter and O. Danai, "Neutrality in land warfare", *Max Planck Encyclopedia of Public International Law*, available from www.mpepil.com.

[334] Bothe (footnote above), pp. 559–560.

due diligence entails responsibility for lack of vigilance as regards acts of non-state actors acting on their own. It is to be recalled that the International Court of Justice acknowledged the "duty of vigilance" of Uganda as an occupying Power with regard to the acts of pillage and looting committed by rebel groups.[335]

89. While the environmental obligations attached to the principle of due diligence, or prevention, in general only apply in a transboundary context,[336] it may thus be concluded that the occupying Power has an analogous obligation with regard to environmental destruction in the occupied territory raising to the level of pillage, also when committed by private actors.[337] The International Law Association has likewise concluded that "occupying States ... have due diligence obligations within the territories that they occupy and the extent of their obligations will vary according to the degree of control they exercise".[338] According to the Rio Declaration, "[t]he environment and natural resources of people under oppression, domination and occupation shall be protected".[339] Reference can furthermore be made to the *Iron Rhine ("Ijzeren Rijn") Railway* case of the Permanent Court of Arbitration, the facts of which did not concern a transboundary environmental effect from one State to another. The Court referred to the International Court of Justice's above-cited statement concerning the existence of a general obligation to respect the environment of other States and areas beyond national control and concluded, by analogy, that "where a State exercises a right under international law within the territory of another State, considerations of environmental protection also apply".[340] It has furthermore been suggested that States should undertake due diligence to prevent and address environmental harm within their jurisdiction or control on the basis of their human rights commitments.[341] All this supports the argument that that an occupying Power has environmental obligations both within the occupied territory and with regard to avoidance of transboundary harm.

C. Sustainable use of natural resources

90. As was mentioned above, article 55 of The Hague Regulations, which allows the occupying State to engage in the exploitation of the natural resources of the occupied territory, has given rise to different interpretations over time. It is generally agreed that the rules of usufruct prohibit predatory exploitation that would put a significant stress on the environment, but the delineation of the positive obligations it poses on the occupant has been less clear. New questions have been raised recently related to the sustainability of the exploitation of the resources of an occupied territory. It has been suggested that the notion of "safeguarding the capital" would, in light of the general development of international law related to natural resources, have

[335] *Armed Activities on the Territory of the Congo* (see footnote 82 above), p. 253, para. 247.

[336] For the definition of transboundary harm, see the draft articles on the prevention of transboundary harm from hazardous activities, commentary to art. 2 (*c*).

[337] Some authors argue that this would be the case with all significant harm caused to the environment during armed conflict or occupation. See, for example, D. Fleck, "Legal protection of the environment: the double challenge of non-international armed conflict and post-conflict peacebuilding", in C. Stahn, J. Iverson and J. S. Easterday (eds.), *Environmental Protection and Transitions from Conflict to Peace*, Oxford University Press, 2017, pp. 203–219. Similarly, M. Mason, "The application of warfare ecology to belligerent occupations", in G. E. Machlis et al., (eds.), *Warfare Ecology: a New Synthesis for Peace and Security*, Dordrecht, Springer, 2011, pp. 155–173.

[338] International Law Association, *Second Report* (see footnote 313 above), p. 18.

[339] Rio Declaration on Environment and Development (see footnote 66 above), principle 23.

[340] *Iron Rhine ("Ijzeren Rijn") Railway* (see footnote 181 above), at paras. 222–223.

[341] See the final Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox, of 24 January 2018 (A/HRC/37/59), Framework Principles 1 and 2, commentary, para. 5.

to be equated with "sustainable use of natural resources".[342] The same requirement can also be based on the human rights obligation of the occupant to see to it that the civilian population has access to the resources and means to enable them to ensure their livelihood.[343]

91. It appears that the origins of the concept of sustainable development, which can be traced to the requirement of optimal use of natural resources, or optimum sustainable yield, found for a long time in the international law related to fisheries and forestry,[344] do in fact come close to the traditional understanding and interpretation of the concept of usufruct in situations of occupation. Reference can be made in this regard to a long-time understanding of "conservation of the substance of the asset" as a premise of the rights of the usufructuary, and to an interpretation, according to which this entails "the general duty to protect the long-term value of the public asset subject to a usufruct".[345] As for actual practice, reference can be made, for instance, to the post-World War II occupation of Japan, during which the occupation authorities actively promoted long-term sustainability in the exploitation of fish and whale stocks.[346]

92. Both notions, optimal use and usufruct, can be described as "essentially principle[s] of conservation, directed at the rational, prudent use of non-renewable resources, and the indefinite maintenance of the productivity of renewable resources".[347] The main rationale for conservation was to ensure continued economic benefits. The notion of optimal use was later broadened to apply to all natural resources, and deepened in its content in the wake of the Stockholm Declaration[348] and the adoption of the World Charter for Nature,[349] so that a new notion, "sustainable use", came to include the protection of the environment and the ecological system as well as the interests of future generations. The concept of sustainable development entails an integrated approach that combines exploitation interests with environmental and social concerns.[350]

93. There are several different interpretations of the elements of sustainable development.[351] According to one definition, which focuses on natural resources, the elements of sustainable development that are evident from the international agreements in which the concept appears can be presented as follows:

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[342] M. Bothe, "The administration of occupied territory" (see footnote 129 above), p. 1467.

[343] For the obligation, see paragraph 59 above. For the argument, see Ferraro, "The law of occupation and human rights law..." (footnote 185 above), p. 282.

[344] See P. Sands, "International law in the field of sustainable development", *British Yearbook of International Law*, vol. 64 (1994), pp. 303–381, p. 306; and N. Schrijver, "The evolution of sustainable development in international law: inception, meaning and status", *Recueil des Cours*, vol. 329, Leiden, Martinus Nijhoff, 2008, pp. 215–412, at p. 367.

[345] Dichter, pointing out that this was the shared understanding of both Israel and the United States, in spite of differences as to certain other aspects of usufruct (see footnote 148 above, at p. 591).

[346] See B. Jones and H. N. Scheiber, "Fisheries policies and the problem of instituting sustainable management: the case of occupied Japan", in H. Young and L. Goldman (eds.), *Livelihoods, Natural Resources, and Post-Conflict Peacebuilding*, Abingdon, Routledge, 2015, pp. 287–306.

[347] Schrijver, "The evolution of sustainable ..." (see footnote 344 above), p. 367.

[348] Stockholm Declaration (see footnote 257 above).

[349] World Charter for Nature (1982), A/RES/37/7.

[350] See T. Kuokkanen, "The relationship between the exploitation of natural resources and the protection of the environment", *International Environmental Law-making and Diplomacy Review 2013*, University of Eastern Finland, UNEP Course Series 13, Joensuu, UEF, 2014.

[351] The most generally accepted definition is contained in the report of the World Commission on Environment and Development, "Our Common Future" (1987), A/42/427: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

- The need to preserve natural resources for the benefit of future generations (the principle of intergenerational equity).
- The aim of exploiting natural resources in a manner which is "sustainable", "prudent", "rational", "wise" or "appropriate" (the principle of sustainable use).
- The "equitable" use of natural resources, which implies that use by one State must take account of the needs of other States (the principle of equitable use, or intragenerational equity).
- The need to ensure that environmental considerations are integrated into economic and other development plans, programmes and projects, and that development needs are taken into account in applying environmental objectives (the principle of integration).[352]

94. Sustainable development has been recognised as a policy objective in all parts of the world.[353] It has been reflected in numerous United Nations documents[354] and treaties.[355] Mostly, however, the relevant treaty provisions do not refer to sustainable development as a legal obligation but as an objective that the parties shall strive to achieve while pursuing their own environmental and developmental policies.[356]

95. The notion of sustainable development has also been referred to and applied in international jurisprudence. The International Court of Justice referred to it in the *Gabčíkovo–Nagymaros* case as well as in the *Pulp Mills* case,[357] pointing out that the need to reconcile economic development with protection of the environment was "aptly expressed in the concept of sustainable development".[358] The Court's decision

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[352] Sands and Peel (see footnote 197 above), p. 218–19. For other definitions, see, for example, M.-C. Cordonier Segger and A. Khalfan, *Sustainable Development Law: Principles, Practices, and Prospects*, Oxford University Press, 2006, p. 45; V. P. Nanda and G. Pring, *International Environmental Law and Policy for the 21st Century*, 2nd ed., Leiden, Martinus Nijhoff, 2013), p. 29; P. Birnie, A. Boyle and C. Redgwell, *International Law and the Environment*, 3rd ed., Oxford University Press, 2009, p. 116-123; and D. French, "Sustainable development" in M. Fitzmaurice, D. Ong and P. Merkouris (eds.), *Research Handbook on International Environmental Law*, Cheltenham, Edward Elgar, 2010, pp. 51–68, at pp. 59–61.

[353] See, for example, the Declaration on the establishment of the Arctic Council, International Legal Materials, vol. 35 (1996), p. 1382; the Yaoundé Declaration on the Conservation and Sustainable Management of Tropical Forests, *International Legal Materials*, vol. 38 (1999), p. 783; Agreements on Co-operation for the sustainable Development of the Mekong River Basin, *International Legal Materials*, vol. 34 (1995), p. 864; the Revised Protocol on Shared Watercourses in the Southern African Development Community, *International Legal Materials*, vol. 40 (2001), p. 321; and the Treaty of the European Union (Lisbon Treaty), *Official Journal of the European Union* C115/13, 9 May 2008.

[354] Outcome Document of the 2012 United Nations Conference on Sustainable Development, "The Future We Want", (2012), A/RES/66/268; see also "Transforming our world: The 2030 Agenda for Sustainable Development" (2015), A/RES/70/1.

[355] For example, the United Nations Framework Convention on Climate Change; the United Nations Convention on Biological Diversity; the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa; the International Tropical Timber Agreement; the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December, 1982 Relating to the Conservation, and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks; and the Agreement on the Establishment of the World Trade Organization. According to one author, references to sustainable development can be found in more than 110 multilateral treaties. See V. Barral, "Sustainable development in international law: nature and operation of an evolutive legal norm", *European Journal of International Law*, vol. 23, No. 2 (2012), pp. 377–400, at p. 384.

[356] Barral, "Sustainable development in international law ..." (see footnote above), p. 384. See also the Rio Declaration on Environment and Development (footnote 66 above), principle 21.

[357] *Pulp Mills* (see footnote 319 above), paras. 171, 175–77 and 184–189. See also the separate opinion of Judge Weeramantry.

[358] *Gabčíkovo-Nagymaros* case (see footnote 201 above), para. 140.

in the joined cases of *Construction of a Road* and *Certain Activities* has added further specifications to international environmental law and strengthened its role in economic activities.[359] Reference can, as well, be made to the *Whaling in the Antarctic* case, in which the Court has been said to "tacitly endorse sustainability in the preservation of whaling stocks".[360] It is to be noted, however, that the Court has not recognized sustainable development as a principle of international environmental law. Sustainable use of natural resources has furthermore been addressed in a number of other court cases such as the *Southern Bluefin Tuna* case,[361] and the advisory opinion regarding the responsibilities and obligations of States, of the International Tribunal for the Law of the Sea,[362] as well as the *China–Rare Earth* case in the World Trade Organization's dispute settlement mechanism.[363] Sustainable use of natural resources has been regarded as one of the most established components of sustainable development in international law.[364]

96. The International Law Association has suggested that treaties and rules of customary international law should be interpreted in the light of the principles of sustainable development unless doing so would conflict with a clear treaty provision or be otherwise inappropriate.[365] In addressing the question whether this should be the case of article 55 of The Hague Regulations, it can be recalled that usufruct is a broad principle that does not entail specific obligations for occupying States. It has traditionally been interpreted to refer to "good housekeeping",[366] according to which the usufructuary "must not exceed what is necessary or usual"[367] when exploiting the relevant resource. Such a criterion necessarily reflects the particular context in which it is used and would seem to lend itself to an evolutive interpretation in the same way as the notion of "civil life" discussed above. To the extent that the notion of

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[359] See M. M. Mbengue, "The economic judgments and arbitral awards: the contribution of international courts and tribunals to the development of international economic law", in W. A. Schabas and S. Murphy (eds.), *Research Handbook on International Courts and Tribunals*, pp. 122–142, at pp. 127–128; and J. Cabrera Medaglia and M. Saldivia Olave, "Sustainable development law principles in the *Costa Rica v. Nicaragua* territorial disputes", in M.-C. Cordonier Segger and C. G. Weeramantry (eds.), *Sustainable Development Principles in the Decisions of International Courts 1992–2012*, Abingdon, Routledge, 2017, pp. 255–265.

[360] *Whaling in the Antarctic (Australia v. Japan: New Zealand intervening), Judgment, I.C.J. Reports 2014*, p. 226. See also the separate opinions of Judge Cançado Trindade and Judge Ad Hoc Charlesworth. Quote from M. Szabó, "Sustainable development in the judgments of the International Court of Justice", in M.-C. Cordonier Segger and C. G. Weeramantry (eds.), *Sustainable Development Principles in the Decisions of International Courts 1992–2012*, Abingdon, Routledge, 2017, pp. 266–280, at p. 278.

[361] *Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan), Provisional Measures, Order of 27 August 1999, ITLOS Reports 1999*.

[362] *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area, List of Cases: No. 17, Advisory opinion of 1 February 2011*, Seabed Disputes Chamber, International Tribunal for the Law of the Sea.

[363] *China — Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum*, Reports of the Appellate Body AB-2014-3, AB-2014-5, AB-2014-6, WTO.

[364] See International Law Association, Committee on the Role of international law in sustainable natural resource management for development, *Conference Report*, Johannesburg 2016. See also International Law Association, *New Delhi Principles of International Law Relating to Sustainable Development*, 2 April 2002.

[365] "[I]nterpretations which might seem to undermine the goal of sustainable development should only take the precedence where to do otherwise would undermine fundamental aspects of the global legal order, infringe the exact wording of a treaty or breach a rule of *jus cogens*", International Law Association, *Sofia Guiding Statement 2*, 2012.

[366] Stone described the rules of usufruct as forbidding "wasteful or negligent destruction of the capital value ... contrary to the rules of good husbandry" (see footnote 121 above, p. 714).

[367] Great Britain, War Office, *The Law of War on Land Being Part of the Manual of Military Law*, 1958, section 610. See, similarly, *The Manual of the Law of Armed Conflict* (footnote 71 above), p. 303, para. 11.86.

sustainable use of natural resources can be described as "a prolongation of the concepts of resource protection, resource preservation and resource conservation, as well as those of wise use, rational use or optimum sustainable yield",[368] it provides the modern equivalent of usufruct. The general duties of the occupant under article 43 of The Hague Regulations also support the inclusion of sustainability as a major consideration to be taken into account in the administration and exploitation of the natural resources of an occupied territory.

97. Sustainable development is an established part of international legal argumentation. Questions nevertheless remain as to its precise content and scope. As a minimum, according to the treaties that mention sustainable development, States are required to integrate environmental considerations into economic development projects, prevent damage to the environment, and cooperate in doing so. Some treaties prescribe additional measures to be taken by States parties.[369] As specified in the relevant jurisprudence, the consideration of sustainable development may require that States take measures of, *inter alia*, conservation, precaution and environmental impact assessment in case of a risk of significant transboundary harm.[370] Such obligations are rarely absolute but depend on the specific circumstances of each case. As far as the sustainable use of natural resources is concerned, it should be added that there are different specific obligations concerning different resources.

98. In the *Construction of a Road* and *Certain Activities* cases, the question was raised whether the environmental obligations would be affected by a state of emergency: "whether or not an emergency could exempt a State from its obligation under international law to carry out an environmental impact assessment, or defer the execution of this obligation until the emergency has ceased".[371] While the Court did not take a position as to the existence of such an emergency exemption, the question has a bearing on situations of occupation. How the requirement of sustainable use of natural resources would translate into practice in a situation of occupation obviously depends on the specific circumstances such as the nature of the occupation and the duration, extent and importance of any exploitation project. Moreover, the actions of the occupying State should not interfere with the sovereign right of the territorial State to decide on its environmental and developmental policies in the exploitation of natural resources of the occupied territory.[372] In this sense, and referring to the established understanding of the concept of usufruct, the occupying State should exercise caution in the exploitation of non-renewable resources and not exceed pre-occupation levels of production. Renewable resources should be exploited in a manner that ensures their long-term use and the resources' capacity for regeneration.

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[368] V. Barral, "National sovereignty over natural resources: environmental challenges and sustainable development" (see footnote 134 above), p. 18.

[369] Barral, "Sustainable development in international law ..." (see footnote 355 above), p. 393.

[370] *Gabčíkovo-Nagymaros* case (see footnote 201 above), *Pulp Mills* (see footnote 319 above), *Construction of a Road* (see footnote 320 above) and *Certain Activities* (see footnote 320 above) cases, and the *Responsibilities and Obligations* advisory opinion (see footnote 362 above). The relevant procedural obligations may also include notification and cooperation.

[371] *Construction of a Road* (see footnote 320 above) and *Certain Activities* (see footnote 320 above), para. 158.

[372] Rio Declaration on Environment and Development (see footnote 66 above), principle 2: "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies". See also Dam-de Jong noting that the principle "leaves States with a broad scope to decide what is sustainable and what is not" (see footnote 128 above, p. 118).

IV. Proposed draft principles

99. In the light of the above, the following draft principles are proposed:

Part Four

Draft principle 19

1. Environmental considerations shall be taken into account by the occupying State in the administration of the occupied territory, including in any adjacent maritime areas over which the territorial State is entitled to exercise sovereign rights.

2. An occupying State shall, unless absolutely prevented, respect the legislation of the occupied territory pertaining to the protection of the environment.

Draft principle 20

An occupying State shall administer natural resources in an occupied territory in a way that ensures their sustainable use and minimizes environmental harm.

Draft principle 21

An occupying State shall use all the means at its disposal to ensure that activities in the occupied territory do not cause significant damage to the environment of another State or to areas beyond national jurisdiction.

V. Future work

A. Questions to be addressed in the second report

100. The second report, to be submitted in 2019, will address certain questions related to the protection of the environment in non-international armed conflicts, including how the international rules and practices concerning natural resources may enhance the protection of the environment during and after such armed conflicts, as well as certain questions related to the responsibility and liability for environmental harm in relation to armed conflicts. Furthermore, issues related to the consolidation of a complete set of draft principles will be considered, including the question of the use of terms and a preamble. It is the hope of the Special Rapporteur that this work will provide a sufficient basis for the topic to be concluded in first reading in 2019.

B. Other issues related to the completion of the work on the topic

101. The general approach to the topic so far has been to address armed conflicts from a temporal point of view: before, during and after. The draft principles in Part One address protection of the environment before the outbreak of an armed conflict. Some of the draft principles of a more general nature are of relevance for all three temporal phases. Part Two of the draft principles pertains to the protection of the environment during an armed conflict, and Part Three to protection after an armed conflict. A few words may be in order to explain how the temporal approach can be applied to situations of occupation which have been said to constitute an intermediate phase between war and peace.

102. The beginning of an occupation does not necessarily coincide with the beginning of an armed conflict, nor is there any necessary concurrence between the cessation of active hostilities and the termination of an occupation. A stable

occupation shares many characteristics with a post-conflict situation and may with time even come to approximate peacetime conditions. While protracted occupations remain governed by the law of occupation, the contribution of other bodies of law such as human rights law and international environmental law may gain more importance. Occupations can nevertheless also be volatile and conflict-prone. Parallels can be drawn between occupations and armed conflicts, on the one hand, and occupations and post-conflict circumstances, on the other, depending on the nature of the occupation.

103. A question therefore arises as to the pertinence of the existing draft principles to situations of occupation. As far as the principles in Part One are concerned, their relevance to situations of occupation does not seem to be in doubt. The basic premise of the draft principles in Part One — such as designation of protected areas — is that the proposed measures are taken with a view to enhancing the protection of the environment in the event of an armed conflict. Such armed conflict may or may not include occupation. To the extent that periods of intense hostilities during an occupation are governed by the rules concerning the conduct of hostilities, the draft principles in Part Two concerning the protection of the environment in the "during" phase would be applicable as such. Additionally, the environment of an occupied territory would continue to enjoy the general protection accorded to the natural environment during an armed conflict in accordance with applicable international law and, in particular, the law of armed conflict as reflected in draft principle 9. As far as Part Three is concerned, however, it seems more prudent to assess the relevance of the principles proposed for post-conflict situations on a case-by-case basis. The considerations to be taken into account are related to the nature of the occupation as well as to the constraints of the law of occupation.

104. It is tentatively suggested that the following draft principles contained in Part Three would be particularly relevant to situations of occupation. No new wording is proposed to the draft principles but it is suggested that in some instances it could be useful to clarify their relationship to situations of occupation in the relevant commentary. This could be the case in respect of:

- Draft principle 6, para. 2 (Protection of the environment of indigenous peoples). This principle, which is not formulated as a legal obligation, could be relevant to the occupying Power as part of its efforts, pursuant to article 43 of The Hague Regulations, to restore and maintain public order and civil life in the occupied territory.

- Draft principle 15 (Post-armed conflict environmental assessments and remedial measures). This draft principle has a general wording that is broad enough to include measures that may be taken by an occupying Power. It does furthermore not imply the existence of a legal obligation. The cooperation of the occupying Power could be encouraged if it is in the position to contribute to post-conflict environmental assessments or remedial measures.

- Draft principle 16 (Remnants of war). This draft principle explicitly refers to areas under the jurisdiction or control of a State and therefore seems to cover situations of occupation.

- Draft principle 17 (Remnants of war at sea). The general reference to States in this draft principle reflects the different legal situations in which remnants of war at sea may constitute a danger to the environment: a particular State may have sovereignty, jurisdiction, both sovereignty and jurisdiction, or neither sovereignty nor jurisdiction with regard to the area in which the remnants are located. Such remnants could also be located in a sea area under the control of an occupying Power.

- Draft principle 18 (Sharing and granting access to information). While the ability of the occupying Power to share or grant access to information obviously depends on the security situation, paragraph 2 contains an exception addressing security concerns.

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Annex

Consolidated list of draft principles that have been provisionally adopted either by the Commission or by the Drafting Committee

Draft principles on protection of the environment in relation to armed conflicts[373]

Introduction

Draft principle 1
Scope

The present draft principles apply to the protection of the environment* before, during or after an armed conflict.

Draft principle 2
Purpose

The present draft principles are aimed at enhancing the protection of the environment in relation to armed conflict, including through preventive measures for minimizing damage to the environment during armed conflict and through remedial measures.

[...]

Part One
General principles

Draft principle 4
Measures to enhance the protection of the environment

1. States shall, pursuant to their obligations under international law, take effective legislative, administrative, judicial and other measures to enhance the protection of the environment in relation to armed conflict.

2. In addition, States should take further measures, as appropriate, to enhance the protection of the environment in relation to armed conflict.

Draft principle 5 [1-(x)]
Designation of protected zones

States should designate, by agreement or otherwise, areas of major environmental and cultural importance as protected zones.

Draft principle 6
Protection of the environment of indigenous peoples

1. States should take appropriate measures, in the event of an armed conflict, to protect the environment of the territories that indigenous peoples inhabit.

2. After an armed conflict that has adversely affected the environment of the territories that indigenous peoples inhabit, States should undertake effective consultations and cooperation with the indigenous peoples concerned, through appropriate procedures and in particular through their own representative institutions, for the purpose of taking remedial measures.

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* Whether the term "environment" or "natural environment" is preferable for all or some of these draft principles will be revisited at a later stage.

[373] Draft Principles provisionally adopted by the Drafting Committee, and which the Commission took note of at its sixty-eighth session, are in italics.

Draft principle 7
Agreements concerning the presence of military forces in relation to armed conflict

States and international organizations should, as appropriate, include provisions on environmental protection in agreements concerning the presence of military forces in relation to armed conflict. Such provisions may include preventive measures, impact assessments, restoration and clean-up measures.

Draft principle 8
Peace operations

States and international organizations involved in peace operations in relation to armed conflict shall consider the impact of such operations on the environment and take appropriate measures to prevent, mitigate and remediate the negative environmental consequences thereof.

Part Two
Principles applicable during armed conflict

Draft principle 9 [II-1]
General protection of the natural environment during armed conflict

1. The natural environment shall be respected and protected in accordance with applicable international law and, in particular, the law of armed conflict.

2. Care shall be taken to protect the natural environment against widespread, long-term and severe damage.

3. No part of the natural environment may be attacked, unless it has become a military objective.

Draft principle 10 [II-2]
Application of the law of armed conflict to the natural environment

The law of armed conflict, including the principles and rules on distinction, proportionality, military necessity and precautions in attack, shall be applied to the natural environment, with a view to its protection.

Draft principle 11 [II-3]
Environmental considerations

Environmental considerations shall be taken into account when applying the principle of proportionality and the rules on military necessity.

Draft principle 12 [II-4]
Prohibition of reprisals

Attacks against the natural environment by way of reprisals are prohibited.

Draft principle 13 [II-5]
Protected zones

An area of major environmental and cultural importance designated by agreement as a protected zone shall be protected against any attack, as long as it does not contain a military objective.

Part Three
Principles applicable after an armed conflict

Draft principle 14
Peace processes

1. Parties to an armed conflict should, as part of the peace process, including where appropriate in peace agreements, address matters relating to the restoration and protection of the environment damaged by the conflict.

2. Relevant international organizations should, where appropriate, play a facilitating role in this regard.

Draft principle 15
Post-armed conflict environmental assessments and remedial measures

Cooperation among relevant actors, including international organizations, is encouraged with respect to post-armed conflict environmental assessments and remedial measures.

Draft principle 16
Remnants of war

1. After an armed conflict, parties to the conflict shall seek to remove or render harmless toxic and hazardous remnants of war under their jurisdiction or control that are causing or risk causing damage to the environment. Such measures shall be taken subject to the applicable rules of international law.

2. The parties shall also endeavour to reach agreement, among themselves and, where appropriate, with other States and with international organizations, on technical and material assistance, including, in appropriate circumstances, the undertaking of joint operations to remove or render harmless such toxic and hazardous remnants of war.

3. Paragraphs 1 and 2 are without prejudice to any rights or obligations under international law to clear, remove, destroy or maintain minefields, mined areas, mines, booby-traps, explosive ordnance and other devices.

Draft principle 17
Remnants of war at sea

States and relevant international organizations should cooperate to ensure that remnants of war at sea do not constitute a danger to the environment.

Draft principle 18
Sharing and granting access to information

1. To facilitate remedial measures after an armed conflict, States and relevant international organizations shall share and grant access to relevant information in accordance with their obligations under international law.

2. Nothing in the present draft principle obliges a State or international organization to share or grant access to information vital to its national defence or security. Nevertheless, that State or international organization shall cooperate in good faith with a view to providing as much information as possible under the circumstances.